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USSR

Outlook and Situation Report

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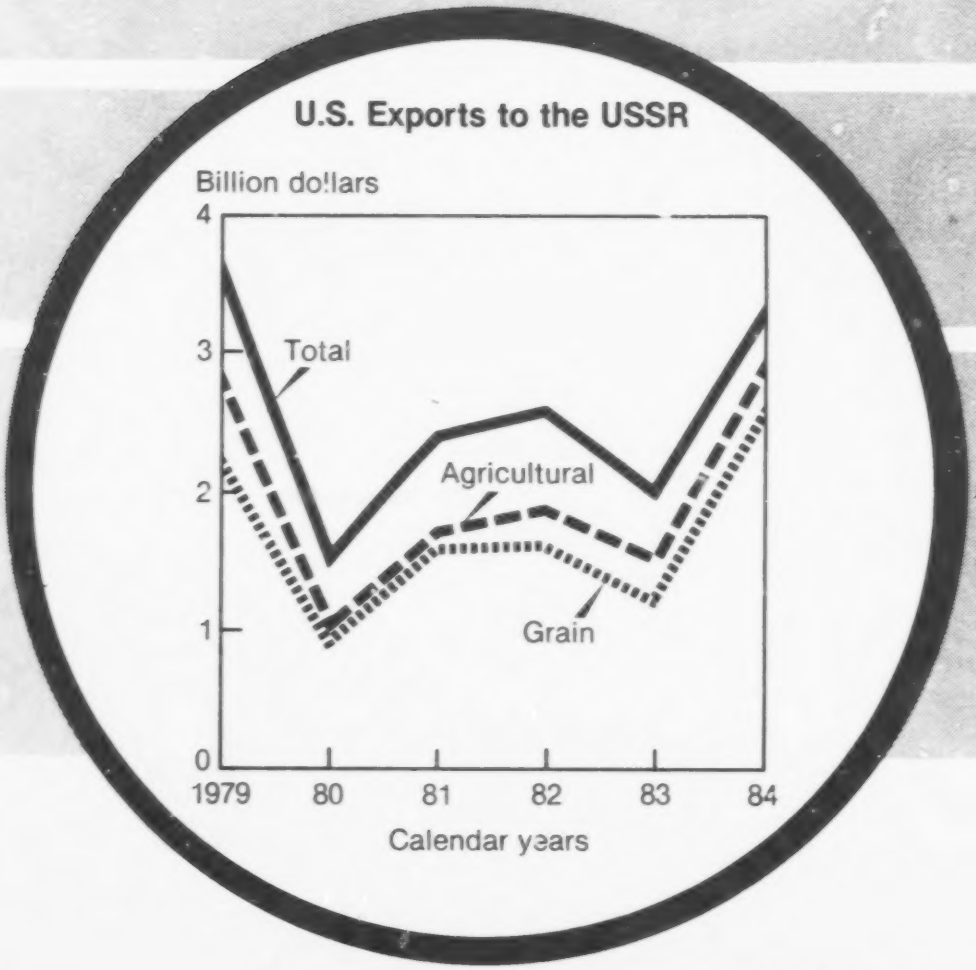

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SUMMARY

The value of U.S. agricultural exports to the USSR almost doubled from calendar 1983 to 1984 as wheat and corn exports reached a record $2.6 billion and cotton a record $167 million. U.S. exports were aided not only by improved relations with the USSR, but also by reduced Soviet grain and cotton production. However, there was a sharp drop in U.S. soybean exports to the USSR.

Large Soviet grain imports approached 1981's 46 million tons and pushed USSR agricultural imports to an estimated $18.8 billion, despite probable declines in sugar, soybeans, soybean meal, and animal product imports. Problems in handling oilmeal in the USSR and the need to conserve hard currency to finance massive grain imports may explain why oilseed and oilmeal imports were cut back dramatically even though Soviet oilseed output declined substantially in 1984. Despite the increase in agricultural imports, the USSR ended the year with an $11-billion trade surplus.

Gross agricultural output in 1984, as reported by the Soviets, fell slightly below 1983. An estimated 11-percent drop in grain output, a 7-percent decline in cotton production, and an 11-percent decline in sunflowerseed output cancelled out gains reported for livestock, potatoes and vegetables, and sugarbeets. Weather was the primary cause of poor performance, although fuel and agrochemical availabilities also may have constrained growth. The stagnation in agriculture stood in contrast to the growth registered elsewhere in the economy.

In the July 1984/June 1985 marketing year, Soviet grain imports are expected to surpass the 1981/82 record by more than 13 percent. Grain import requirements will remain high through midyear as limited 1984/85 Soviet feed supplies were further taxed by a severely cold winter even by Soviet standards. The severe cold and short feed supplies affected livestock production and caused inventory adjustments, which may slow the growth in livestock product output in 1985. Good snow cover protected winter grains and soil moisture conditions are the best in at least 3 years. However, because of the late arrival of spring weather, crop sowing got off to a slow start.

Mikhail Gorbachev's election as the new General Secretary of the Communist Party may have a positive impact on the agricultural sector, irrespective of weather, if he can effect a renewed commitment to increase labor productivity and better coordinate the activities of farms with those of the agricultural supply and processing enterprises.

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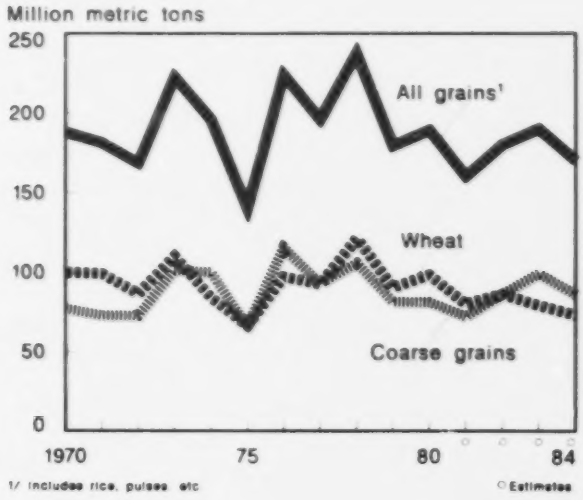
AGRICULTURE STAGNATES IN 1984

Grains led the decline in crop output, and cotton and sunflowerseed production dropped substantially below 1983. Weather was the primary culprit, although inadequate agricultural infrastructure continued to limit production gains. The livestock sector experienced substantial growth early in the year, reflecting record-large feed supplies from the 1983 grain and forage crops. However, 1984 forage crops and pastures got off to a poor start, and the grain crop proved even more disappointing. By the end of the year, production and productivity increases in the livestock sector slowed. End-of-year inventories of hogs, cows, and sheep and goats were below 1983.

Grain Output Falls

Severe drought in important spring grain areas and a fourth straight year of declining grain area resulted in an estimated 1984 grain harvest of 170 million tons, down about 11 percent from USDA's estimate of the 1983 crop. Above-average grain harvests were confined largely to western and northwestern areas of the European USSR and to parts of western Siberia. Output was well below average in the Volga Valley, Central Black Soil Zone, and Kazakhstan. Wheat production, estimated at 73 million tons, fell to its lowest level since the disastrous 1975 crop. Coarse grain production fell an estimated 13 percent from the 1983 record to 86 million tons. Total grain production during 1981-84 averaged an estimated 175 million tons, and with 1 year left in the current Five Year Plan, average production trails the State grain output target for 1981-85 (238-243 million tons) by an unprecedentedly large amount.

USSR Grain Production



Area Continues Slide

Soviet grain area in 1984 was 119.6 million hectares, 1.2 million less than in 1983 and more than 8 percent below the recent peak of 130.3 million in 1977 (table 1). Not since 1971 has Soviet grain area been so small. Part of the reason for the decline was a continued increase in area of clean summer fallow from 19.5 million hectares in 1983 to 20.1 million in 1984. Other reasons include a failure to fully meet spring grain sowing targets due to dry conditions and larger-than-normal harvesting of corn prior to full maturity.

Coarse grains accounted for the entire grain area decline in 1984, falling 2 million hectares from 61.2 million in 1983. Wheat area increased slightly in 1984, because some improvement in moisture conditions in the fall of 1983 resulted in higher winter wheat area. Despite these shifts, coarse grain's share of total grain area in 1984 was the second highest since 1955. Though Soviet plans stress larger corn-for-grain area, this area remained below the 1982 level.

Drought Affects Yields

Despite generally mild winter temperatures, the combination of abandonment and diversion of winter grains to grazing in spring--estimated at 17 percent of fall sown area--was within the long-term average of 15-18 percent. Lack of soil moisture accumulation in the winter of 1983/84 increased reseeding of winter grain fields with spring grains in many southern and eastern areas of the European USSR and left the grain crop highly vulnerable to spring and summer drought. Sowing of spring grains was generally timely, though the area fell short of plan requirements.

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Table 1--Area, yield, and production of grain, USSR, 5-year averages and 1981-84 annual

Year	Wheat			Rye	Barley	Oats	Corn	Other 1/	Total grain
	Winter	Spring	Total						
				1,000 hectares					
Area									
1966-70 average	18,280	48,894	67,174	11,505	20,331	8,680	3,517	10,876	122,083
1971-75 average	18,443	43,025	61,468	8,500	28,370	11,310	3,596	10,743	123,987
1976-80 average	20,471	40,240	60,711	7,714	34,011	12,080	2,969	10,421	127,905
1981	20,305	38,927	59,232	7,551	31,781	12,470	3,545	10,980	125,559
1982	20,438	36,840	57,278	9,829	29,706	11,489	4,161	10,549	123,012
1983 2/	16,850	33,973	50,823	10,334	31,679	12,389	3,894	11,690	120,809
1984 2/	17,956	33,105	51,061	9,420	30,426	12,806	3,919	11,980	119,612
				Metric tons per hectare					
Yield									
1966-70 average	1.96	1.11	1.34	1.12	1.50	1.38	2.72	1.16	1.37
1971-75 average	2.26	1.10	1.45	1.35	1.53	1.31	2.84	1.19	1.46
1976-80 average	2.48	1.22	1.64	1.41	1.62	1.42	3.22	1.21	1.60
1981 3/	1.97	1.03	1.35	1.26	1.18	1.20	2.26	.91	1.27
1982 3/	2.30	1.06	1.50	1.42	1.38	1.35	3.24	.95	1.46
1983 4/	2.22	1.22	1.55	1.35	1.70	1.37	3.08	1.20	1.57
1984 4/	2.23	1.00	1.43	1.42	1.38	1.27	3.19	1.06	1.42
				1,000 metric tons					
Production									
1966-70 average	35,888	54,304	90,192	12,834	30,454	11,938	9,558	12,585	167,561
1971-75 average	41,590	47,345	88,935	11,493	43,269	14,812	10,215	12,810	181,554
1976-80 average	50,725	48,948	99,673	10,880	55,150	17,161	9,568	12,595	205,027
1981 3/	40,000	40,000	80,000	9,500	37,500	15,000	8,000	10,000	160,000
1982 3/	47,000	39,000	86,000	14,000	41,000	15,500	13,500	10,000	180,000
1983 4/	37,400	41,600	79,000	14,000	54,000	17,000	12,000	14,000	190,000
1984 4/	40,000	33,000	73,000	13,400	42,100	16,300	12,500	12,700	170,000

1/ Includes millet, buckwheat, rice, pulses, and miscellaneous grains. 2/ Revised following Soviet release of area data by grain type. 3/ USDA estimate. 4/ USDA estimate revised following Soviet release of area data by grain type.

The impact of the major droughts in May and July was substantiated by reports of stunted, drought-damaged grain from a broad portion of the Soviet grain belt from Kazakhstan to the Central Black Soil Zone south of Moscow. Reports from Kazakhstan were particularly pessimistic. The grain crop there was described as being "grown this year under incredibly difficult conditions," and "nearly everywhere the grain turned out stunted and sparse." 1/ In most of Siberia, the growing season was generally too cold and wet, which delayed crop development. Harvesting in these areas was complicated by extensive lodging of grain. 2/

Largely because of drought damage, nearly 10 million of the 119.6 million hectares of Soviet grain in 1984 were not harvested, though this acreage is included in Soviet statistics as "final" grain area. Farm managers apparently felt that yields in certain areas had been reduced to the point where harvesting was not worth the expenditure of material inputs and labor. Late-season abandonment of comparable magnitude occurred in 1972 and 1979, when Soviet grain yields were 1.40 and 1.42 tons per hectare respectively.

In 1984, a number of fuel conservation measures were implemented in agriculture that probably had some negative impact on both the size and the quality of the 1984 grain crop. Sales to the state of high-gluten and durum wheats continued to decline in 1984. 3/ Harvest reports spoke of higher wheat quality in the North Caucasus and southern and eastern Ukraine, but in many parts of the country, grain was delivered to elevators with a moisture content of 23-25 percent and more. 4/ Serious harvest shortfalls in the important bread-wheat areas of Kazakhstan and the Volga Valley reduced farm sales of bread wheat to the state and contributed to record wheat imports in 1984/85.

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Table 2--Supply and utilization of grain, USSR, 1976/77-1984/85 1/

Year beginning July 1	Production 2/	Trade		Availability	Utilization						
		Imports	Exports		Seed	Industrial	Food	Dockage-waste	Feed	Total	Stock change 3/
					Million metric tons						
Total grains 4/											
1976/77	223.8	11.0	3.3	232	29	4	45	31	112	221	+11
1977/78	195.7	18.9	2.3	212	28	4	45	29	122	228	-16
1978/79	237.4	15.6	2.8	250	28	4	46	28	125	231	+19
1979/80	179.2	31.0	0.8	209	28	4	46	22	123	223	-14
1980/81	189.1	34.8	0.5	223	27	4	47	28	119	225	-2
1981/82	160.0	46.0	0.5	206	27	4	47	16	116	210	-4
1982/83	180.0	32.5	0.5	212	27	4	47	18	117	213	-1
1983/84	190.0	32.9	0.5	222	27	4	47	21	123	222	0
1984/85	170.0	52.0	1.0	221	27	4	48	19	123	221	0
Wheat											
1976/77	96.9	4.6	1.0	100	15	1	35	14	28	93	+7
1977/78	92.2	6.6	1.0	98	15	1	35	14	44	109	-11
1978/79	120.8	5.1	1.5	124	14	1	35	14	43	107	+17
1979/80	90.2	12.0	0.5	102	15	1	35	11	53	115	-13
1980/81	98.1	16.0	0.5	114	15	1	36	15	48	115	-1
1981/82	80.0	19.5	0.5	99	15	1	36	8	42	102	-3
1982/83	86.0	20.2	0.5	106	15	1	36	9	45	106	0
1983/84	79.0	20.5	0.5	99	15	1	36	9	38	99	0
1984/85	73.0	26.0	1.0	98	15	1	37	8	37	98	0
Coarse grains 5/											
1976/77	115.0	5.7	2.0	119	12	3	7	16	78	116	+3
1977/78	92.6	11.7	1.0	103	11	3	7	14	74	109	-6
1978/79	105.0	10.0	1.0	114	12	3	7	13	79	114	0
1979/80	81.0	18.4	0	99	12	3	7	10	68	100	-1
1980/81	81.0	18.0	0	99	11	3	7	12	67	100	-1
1981/82	72.0	25.5	0	98	11	3	7	7	71	99	-1
1982/83	86.0	11.3	0	97	11	3	7	9	68	98	-1
1983/84	99.0	11.5	0	110	11	3	7	11	78	110	0
1984/85	86.0	25.0	0	111	11	3	7	10	80	111	0

1/ All are USDA estimates except production 1976-80. Rounded to the nearest million tons, except for production and trade data. Totals may not add due to rounding. Production data for 1983 and 1984 revised following release of Soviet data on area by grain type. 2/ Calendar year basis. 3/ Difference between availability and total utilization. 4/ Includes wheat, coarse grains, buckwheat, rice, pulses, and miscellaneous grains. 5/ Includes rye, barley, oats, corn, and millet.

Grain Supplies Tight

Continued expansion of the livestock sector in 1984, smaller availabilities of nongrain feeds, and a colder-than-normal winter are believed to have held the use of grain for feed in 1984/85 at the relatively high level of 123 million tons (table 2). Industrial, food, and seed use of grain is estimated to be virtually unchanged. Record grain imports of 52 million tons likely will be required to satisfy grain utilization needs in the 1984/85 marketing year. The smallest wheat harvest since 1975 and probable wheat quality problems will result in record wheat imports in 1984/85. The 13-percent drop in coarse grain production and continued heavy feed requirements will push coarse grain imports to around 25 million tons--the second highest on record.

Good Start for Winter Grains

Last fall winter grains were sown on 35 million hectares, the same as a year earlier and only 1 million hectares short of plan. Early seeding and good moisture supplies through the fall allowed winter grains to become well established. Snow cover generally remained adequate to protect grain during an unusually cold winter. Winterkill should be no more than the average of 15-18 percent. Soil moisture recharge this winter was better than in 1983, particularly in the North Caucasus, Volga Valley, and Central Black Soil Zone. [*Edward Cook (202) 475-4508*]

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Corn Expansion Plan

Soviet medium-term plans call for corn production to increase to 20 million tons by 1990, compared with the 1976–80 average of 9.6 million tons. 5/ Compliance with the plan would reduce Soviet corn import requirements. However, after rebounding from 2.5 million hectares in 1978 to 4.2 million in 1982, corn-for-grain area was 3.9 million hectares in 1983 and 1984. 6/ This occurred despite an original plan target for 1984 of 5.7 million hectares.

One reason for the failure to increase corn area harvested for grain is that the short growing season leads to high moisture content of the grain at harvesttime--30–45 percent. 7/ Soviet farms have inadequate drying facilities, fuel shortages for drying are common, and waste rates from traditional crib drying reach as high as 25 to 30 percent. 8/

As a result, much of the area intended for grain corn is usually diverted to silage. Furthermore, the Soviet Union has expanded the practice of ensiling chopped corn with cobs rather than drying the corn to storable levels. Loss rates for such high-moisture corn--cornage--are reportedly less than 10 percent. And because the corn plant is harvested while it's still green (1–3 weeks prior to full grain maturity), total feed value per hectare is reportedly higher than when the corn is harvested for grain alone.

The USSR is cooperating with Hungary in experiments to use high-moisture corn in hog feed rations. 9/ The aim is to limit growth in corn import requirements as more domestic corn is harvested and fed at high-moisture levels. Attainment of grain corn production plans during the rest of the 1980's will depend on increasing the share of early maturing varieties, expanding drying capabilities, and allocating sufficient fuel oil for drying. Given the recent emphasis on fuel conservation in agriculture, this may be difficult to achieve. [*Edward Cook (202) 475-4508*]

Feed Supplies Tighter in 1984/85

Record grain imports and good harvests of silage, haylage and feed roots kept total feed supplies in 1984/85 from declining nearly as much as the disappointing grain harvest would indicate. Feed availability is estimated down only about 2 percent from 1983/84 and is the second highest on record (table 3). Declines of 12 percent in hay production, 8 percent in artificially dehydrated alfalfa and grass meal production, and less pasture feed consumed accounted for the drop. Concentrate feed supplies, bolstered by record grain imports, are estimated roughly unchanged from 1983/84. Feed per animal unit, though down from last year, remains about average for the last 8 years.

Feed quality, after increasing fairly steadily between 1980 and 1983, probably declined slightly last year. Most likely affected was the hay crop, which was harvested under wet conditions in the western and northern European USSR and much of Siberia. The need to economize on fuel use and wetter-than-normal conditions in these areas may have forced reduced production of alfalfa and grass meal and other artificially dehydrated feeds. The unusually cold winter and the slight deterioration in both feed quantity and quality have combined in the first half of 1985 to slow the 2-year growth in livestock production.

Soviets Continue Emphasis On Roughages

Soviet planners continue to stress the need to limit reliance on concentrate feed and have had some success in recent years. 10/ In 1978/79 and 1983/84, concentrates fed were virtually the same while meat, milk, and egg production increased 9, 5, and 16 percent between the two periods. The strategy centers upon improving the quantity and quality of roughage supplies. The Soviets have made large investments in machinery for

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Table 3--Soviet feed supplies by type in oat-unit equivalent, January 1 standard animal units, and feed per standard animal unit, 1977/78-1984/85

Units	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84 1/	1984/85 1/
				Million tons				
Total feed	401.3	415.9	392.5	396.6	384.1	413.2	433.3	425.7
Coarse 2/	78.7	87.8	76.4	82.4	80.7	86.3	94.0	86.8
Pasture	64.6	64.5	61.7	61.2	61.4	62.6	64.0	62.9
Succulents 3/	86.9	88.8	81.9	84.1	76.5	96.4	100.6	100.5
Concentrates 4/	171.1	174.8	172.5	168.9	165.5	167.9	174.7	175.5
				Million units				
January 1 total animal units 5/	143.9	147.0	148.7	149.4	150.8	153.4	156.3	156.8
				Tons				
Feed per standard animal unit	2.79	2.83	2.64	2.65	2.55	2.69	2.77	2.71

1/ Preliminary. 2/ Includes hay, haylage, and straw. 3/ Includes silage, green chop, potatoes, feed roots, melons, and beet pulp. 4/ Includes grain, millfeeds, oilmeal, fish and animal meal, grass meal, feed yeasts, and whole and skim milk. 5/ In terms of cows, conversion ratios as follows: Cattle (other than cows) 0.6, hogs 0.3, total sheep and goats 0.1, horses 1.0, and poultry 0.02.

harvesting, handling, and distributing roughages, and also in storage of roughages, particularly silage and haylage. Feed crops have received an increasing share of fertilizer and continue to account for a large share of irrigated and drained land.

In the last 2 years, particular emphasis has been placed on establishing roughage production as an independent branch of agriculture. 11/ The aim is to improve the timeliness and scope of feed crop field operations and postharvest handling and storage. This generally has not meant the establishment of specialized feed production farms, but rather of feed production units that exist side by side at the farm level with units for livestock, food, and technical crop production. Workers are assigned to these feed units on a long-term basis and, along with machinery, fertilizer and other inputs, are not to be diverted to other branches of agriculture.

Soviet scientists have devised new feeding norms that reflect the higher priority for nongrain feeds, not only for cattle, but also for hogs. 12/ The new norms increase the number of feed composition indicators from 6 to 24 and in the case of cattle, allow for a 10-12 percent reduction in protein requirements. 13/

Marginal Improvement in Feeding Efficiency

Soviet data indicate that feeding efficiency improved marginally in the socialized sector in 1983 (table 4). Feed used per unit of liveweight gain for both cattle and hogs was at its lowest level since at least 1980. Feed expended per kilogram of milk production, though slightly lower than in the preceding 2 years, remained above 1.4-1.5

Table 4--USSR feed-conversion coefficients (kilogram of oat-unit equivalent/ kilogram of output), 1971 and 1980-83

Product	1971	1980	1981	1982	1983
Beef	10.3	13.4	13.8	13.4	13.2
Pork	9.2	9.2	9.0	9.2	8.8
Milk	1.4	1.5	1.6	1.6	1.55
Broilers 1/	4.6	4.3	NA	NA	4.1
Eggs 1/	2.8	2.0	NA	NA	1.9

NA = Not available. 1/ Data are for 1970 instead of 1971. Ptitseprom system (state poultry industry) only. Eggs--oat units per 10.

Sources: Ekonomika sel'skogo khozyaistva (Agricultural Economics), no. 5 (1972) and no. 1 (1983); Vestnik statistiki (Statistical Bulletin), no. 10 (1981), no. 11 (1983), and no. 10 (1984), and Ptitsevodstvo (Poultry Raising), no. 9 (1984).

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feed units, the average for the 1970's. Data from Ptitseprom, the state poultry raising industry, indicate that feed conversion efficiency for broilers and eggs improved modestly between 1980 and 1983. Ptitseprom produces 60 percent of the eggs in the USSR and nearly all of the broilers [*Edward Cook (202) 475-4508*]

The Soviet Mixed Feed Industry

Mixed feeds account for slightly more than half of all concentrates fed in the USSR, but less than 20 percent of all feeds on an energy basis. The Soviet mixed feed industry is particularly important because of its tie to imported coarse grains and oilseed meal. In a typical year most imported coarse grain and nearly all imported oilseed meal are used by the mixed feed industry rather than being shipped directly to farms. Currently, the protein content of Soviet mixed feeds remains well below formulation guidelines. The need to raise protein content, combined with planned growth in mixed feed production, could mean a recovery of oilseed meal imports and could limit attempts to reduce coarse grain imports in coming years.

Mixed feed production in the USSR developed gradually from 2.5 million tons in 1955 to 23.7 million in 1970 and 64.4 million in 1980. Since 1980, data on mixed feed production have not been published, but evidence suggests output now exceeds 70 million tons a year. 14/ Nearly 80 percent of Soviet mixed feed is produced in the state mixed feed industry (under the Ministry of Procurement). The remainder is produced under the direction of the Ministry of Agriculture, primarily at local inter-farm enterprise mixed feed plants.

The state mixed feed industry consists of roughly 600 plants with an average annual production of 90,000 tons each. Average production capacity per plant has increased steadily since the early 1970's when emphasis shifted to construction of larger scale plants that could produce 100,000-200,000 tons per year. Over this same period, the introduction of computers for ration formulation was largely completed. Thirty-eight percent of state mixed feed production is for poultry, a comparable share is for hogs, and 17 percent is for cattle. About 5 percent is for sheep, fish, and other animals. The share for poultry increased steadily from 17 percent in 1965 at the expense of the shares for hogs and cattle.

Despite an emphasis on the use of nongrain feeds, the share of grain in mixed feeds produced by the state industry increased from 55 percent in 1964 to 65 percent in 1978 and 70 percent in the early 1980's. Corn, wheat, and barley account for nearly all the grain used in the state mixed feed industry. In 1978, 8-9 million tons of each were used. The share of oilseed meal in Soviet mixed feeds declined from 9.7 percent in 1964 to less than 8 percent in the early 1980's. This, combined with a gradually declining share of animal meals, caused a drop in the average protein content of Soviet mixed feeds.

Mixed feed formulas by animal type are established nationwide, with variations based on differing raw material availability. However, less than 10 percent of state mixed feed plants are able to produce the recommended formulas. A large part of the problem is the shortage of protein. In 1979, only 19 percent of state mixed feeds met standards for protein content and that share has likely declined in recent years. Furthermore, supplies of many minerals and vitamins remain 50 percent or more below requirements.

The mixed feed plants themselves have very little interest in improving the quality of their output. Performance evaluation and profitability of Soviet mixed feed plants are based primarily on gross value of output. Gross output is calculated using wholesale mixed feed prices, which are based on state-set prices for feed ingredients. Profit for a plant is set primarily as a constant percent of the value of gross output. A director of a Soviet mixed feed plant is therefore less interested in whether output meets formulation standards than whether the most expensive feed ingredients have been

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Table 5--Prices for protein feed ingredients, USSR

Commodity	Per ton	Per feed unit	Per ton digestable protein
		Rubles	
Meat and bone meal	258	214	534
Fish meal	677	677	1,263
Feed yeasts	620	543	1,565
Soybeans	287	208	989
Peas	138	117	707
Sunflowerseed meal	20	18	50
Soybean meal	20	16	54

secured. The state-determined feed ingredient prices appear far from rational (table 5). The low value assigned soybean and sunflowerseed meal apparently stems from their treatment as byproducts of the vegetable oil industry. As a result, the "costs of production" of these items are minimal and this is reflected in their price.

Production of mixed feed outside of the state industry is carried out under the Ministry of Agriculture and depends heavily on local feed resources. Nearly 800 enterprises of inter-farm associations and roughly 4,000 state and collective farms are involved in mixed feed production. They rely on the state mixed feed industry for protein concentrates to mix with local ingredients, primarily grain. In 1980, 2.8 million tons of protein concentrates were supplied to Ministry of Agriculture plants, allowing them to produce 16.5 million tons of mixed feed.

Plans call for Soviet mixed feed production to reach 112 million tons by 1990, up nearly 75 percent from 1980. Most of the growth is anticipated not in the state mixed feed industry, but in the local mixed feed plants of the Ministry of Agriculture, where production is scheduled to roughly triple during the 1980's. The Soviets face two major problems with this strategy. First, the mixed feed plants of the Ministry of Agriculture are even more deficient than the state industry in supplies of feed additives and the quality of their product is correspondingly lower. Second, the Ministry of Agriculture feed plants are dependent on the state mixed feed industry for supplies of protein concentrates. Because high protein ingredients are in short supply, these concentrates currently contain only two-thirds of the stipulated protein. For the mixed feed production targets to be met, protein supplies need to be increased radically.

Oilseed meal use in the state mixed feed industry declined from 4 million tons to 3 million tons last year. Domestic supplies of feed pulses, single cell protein, meat and bone meal, and synthetic amino acids have improved in recent years, but they probably compensate for only a portion of the reduced oilseed meal production. Why then have soybean meal imports been cut back since 1983? Possibly the gross undervaluation of soybean meal within the mixed feed industry resulted in careless handling and storage and therefore high waste rates that may have contributed to the cutback in imports. The efficient transportation and storage facilities that are required to avoid spoilage of meals may not have been sufficient for the rapid increase in soybean meal imports in the early 1980's. Furthermore, planners may be attempting to force the issue of protein self-sufficiency, which is a stated goal of Soviet long-term agricultural planning. [*Edward Cook (202) 475-4508*]

Little Growth in Livestock Numbers

Initial Soviet reports indicate that livestock production increased only 1-1.5 percent in 1984, although production of meat, milk, and eggs all reached records. The growth was facilitated by abundant feed supplies early in the year. With the smaller grain and forage harvest in 1984, growth rates declined in the second half of the year. According to preliminary reports, livestock holdings of all major animal types declined in the private sector, while the socialized sector accounted for all increases in production and nearly all the increased sales to the state. The declines in the private sector may result from the continued low priority it receives and possibly some accounting adjustments because of contract arrangements with collective and state farms.

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Hog and Cow Numbers Down

Overall, 1984 witnessed the smallest increase in total animal units since 1975 (table 6). Cattle numbers increased 1 percent, but inventories of cows, hogs, and sheep and goats all declined. The 2-percent decline in sheep and goat numbers resulted directly from poor pasture conditions during summer in Kazakhstan, Soviet Central Asia, and parts of the Russian Republic (RSFSR).

All of the decline in hog numbers was in the private sector, as socialized sector inventories were maintained at the previous year's level. The reason for this disparity may not be simply preferential access to concentrate feed supplies in the socialist sector, but also a change in livestock accounting that attributes certain private livestock holdings to the socialized sector. In recent years, there have been attempts to produce livestock on a contract basis between the socialized sector and private livestock raisers. Under this system, livestock are raised on private plots, but can remain the property of the socialized sector. 15/ During 1983, when overall concentrate feed supplies increased rather than declined, the same sort of inter-sectoral shift occurred. Socialized sector hog inventories grew nearly 4 percent while private sector hog numbers declined by 1.5 percent. This could indicate either an accounting shift among sectors, a declining interest among private plot holders in maintaining livestock, or a renewed policy of limiting private sector hog inventories. Major increases in livestock procurement prices as of January 1, 1983, greatly enhanced the profitability of livestock raising in the socialist sector and may thereby have sharpened conflicts between the socialist and private sectors for available feed supplies, to the detriment of the latter.

The fall in cow inventories may be due in part to the reduced emphasis on maintaining unproductive animals. Traditionally, farm performance has been evaluated in part on whether livestock numbers have increased over the year. Even in years of relatively tight feed supplies, farms were expected to at

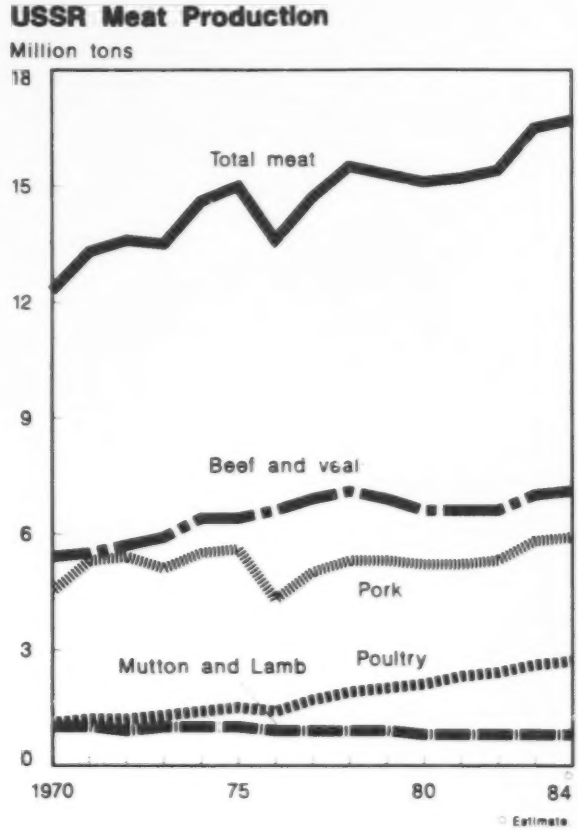

Table 6--January 1 livestock numbers and animal units, USSR, for selected years and 1981-85

Year	Cattle		Hogs	Sheep	Goats	Horses	Poultry	Total animal units 1/
	Total	Cows						
				Million head				
1971	99.2	39.8	67.5	138.0	5.4	7.4	652.7	130.5
1976	111.0	41.9	57.9	141.4	5.7	6.4	734.4	136.5
1981	115.1	43.4	73.4	141.6	5.9	5.6	1,032.4	149.4
1982	115.9	43.7	73.3	142.4	6.1	5.6	1,067.5	150.8
1983	117.2	43.8	76.7	142.2	6.3	5.6	1,104.5	153.4
1984	119.6	43.9	78.7	145.3	6.5	5.7	1,126.1	156.3
1985	120.8	43.5	77.8	2/ 142.4	2/ 6.4	2/ 5.7	2/ 1,150.0	2/ 156.8

1/ In terms of cows. Conversion ratios as follows: Cattle (other than cows) 0.6; hogs 0.3; total sheep and goats 0.1; horses 1.0; and poultry 0.02. 2/ Estimate.

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least maintain livestock numbers. In 1984, planners eliminated the requirement of maintaining cow inventories for farms in certain parts of the USSR. This led to the culling of many unproductive cows, which reportedly increased both feeding efficiency and milk production. 16/ In 1984, cow inventories in the socialized sector experienced the largest decline since at least 1965.

Record Livestock Production

Total meat production in 1984, reported at 16.7 million tons (carcass weight), is lower than anticipated based on available feed supplies, reports of socialized sector production, and state meat procurements (table 7). In each of the last 2 years, initial meat production figures were revised upward by spring or summer. The 1984 figure may also be revised upward, possibly to around 16.9 million tons. As in the previous year, the largest increases were probably in pork and poultry meat. Meat production in the socialized sector increased roughly 4 percent to nearly 12.2 million tons, implying nearly a 5-percent decline in private sector production.

State purchases of meat in 1984 reached 18.2 million tons (liveweight), 4 percent above 1983. Higher sales from the socialized sector accounted for most of the increase, although private sector sales were up 13 percent, or 67,000 tons, in January-November. The larger state purchases allowed industrial meat production to increase 5 percent to 10.6 million tons. Per capita consumption of meat (including edible fats and offals) is estimated to have increased 1-2 kilograms to a record 59-60 kilograms in 1984 (table 8).

Table 7--Production of principal livestock products, USSR, 5-year averages and 1981-84 annual

Year	Meat 1/						Milk	Wool 2/	Eggs
	Total	Beef and veal	Pork	Mutton, lamb, and goat	Poultry	Other			
	1,000 metric tons								Millions
1966-70 average	11,583	5,187	4,327	992	853	224	80,553	NA	35,840
1971-75 average	14,004	5,985	5,394	972	1,335	318	87,446	425	51,427
1976-80 average 3/	14,843	6,827	5,009	882	1,835	290	92,662	442	63,133
1981	15,201	6,627	5,220	846	2,255	253	88,874	460	70,855
1982	15,370	6,618	5,273	816	2,425	238	91,044	452	72,409
1983	16,450	7,011	5,760	837	2,596	246	96,450	462	75,110
1984	4/ 16,700	5/ 7,100	5/ 5,900	5/ 800	5/ 2,675	5/ 225	4/ 97,600	4/ 463	4/ 76,000

1/ Carcass weight, including fat. 2/ Physical weight. 3/ Revision based on the average published in Narodnoe khozyaistvo SSSR 1982 (National Economy of the USSR 1982). Is not consistent with average derived from last published figures for each year. 4/ Preliminary Soviet figure. 5/ ERS estimate.

Table 8 -USSR consumption norms of selected food products and per capita consumption, selected years 1950-80 and 1990 plan

Year	Meat and fat	Fish and fish products	Milk and milk products 1/	Eggs 2/	Sugar	Vegetable oil	Potatoes	Grain 3/	Vegetables and melons	Fruit and berries
	Kilograms									
1950	26	7.0	172	60	11.6	2.7	241	172	51	11
1960	40	9.9	240	118	28.0	5.3	143	164	70	22
1970	48	15.4	307	159	38.8	6.8	130	149	82	35
1980	58	17.6	314	239	44.4	8.8	109	138	97	38
1981	57	18.0	304	247	44.5	9.1	104	137	99	40
1982	57	18.4	295	249	44.5	9.3	110	137	101	42
1983	58	17.6	309	253	44.2	9.6	110	136	101	44
1990 plan	70	19.0	330-340	260-266	45.5	13.2	110	135	126-135	66-70
Consumption norm 4/	82	18.2	405	292	40.0	9.1	110	115	130	91

1/ Including milk equivalent of butter. 2/ Number. 3/ Flour equivalent. 4/ Narodnoe blagosostoyanie SSSR (National Welfare in the USSR), 1983, p. 165.

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Following rapid growth in 1983, milk production increased an additional 1.2 percent in 1984 and is within the 97–99 million–ton range that planners hope to average in 1981–85. Higher milk yields per cow, which increased an estimated 2 percent to 2,300 kilograms, accounted for all of the increase. Sales of milk to the state increased much more rapidly--by 4.4 percent--and reflect probable declines in on–farm feeding of whole milk. The decline in feeding of whole milk has been facilitated by increased availability of whole milk substitutes. Industrial butter production, which increased an estimated 3 percent to 1.5 million tons, continues to account for the largest share of state whole milk utilization. Production of whole milk and whole milk products rose 3 percent to 28.6 million tons. Cheese production increased an estimated 5 percent to 780,000 tons. Per capita consumption of milk (including the milk equivalent of butter, cheese, and other milk products) rose an estimated 6 kilograms to 315 kilograms, re–attaining the consumption level of 1980.

Egg production increased by only 1.2 percent to 76 billion. This was the smallest gain since 1976 and may reflect reduced emphasis on egg production rather than simply a shortage of feed. Eggs are the only major livestock product running ahead of Soviet medium- term production plans. Wool production, at 463,000 tons (physical weight basis), increased only 1,000 tons from 1983. [*Edward Cook (202) 475–4508*]

Sugarbeet Production Up

Soviet sugarbeet output increased for the third consecutive year, and reached 85.3 million tons in 1984 (table 9). Nonetheless, output remained below past production levels and current targets. During the previous 5–year plan (1976–80), production averaged almost 89 million tons per year and the 1981–85 plan calls for 100–103 million tons per year. Reductions in sown area, shortages of

Table 9--Area, yield, and production of selected crops, USSR, 5-year averages and 1981–84 annual

Year	Seed-cotton	Sugar-beets	Sun-flowers	Fiber flax 1/	Potatoes	Vege-tables	Fruit, berries, grapes 2/
				1,000 hectares			
Area							
1966–70 average	2,527	3,582	4,837	1,341	8,238	1,440	4,753
1971–75 average	2,810	3,527	4,474	1,234	7,953	1,601	4,855
1976–80 average	3,043	3,745	4,471	1,156	7,020	1,629	4,804
1981	3,168	3,633	4,235	946	6,854	1,703	4,795
1982	3,188	3,526	4,250	1,014	6,636	1,715	4,809
1983	3,192	3,491	4,266	1,063	6,882	1,725	4,830
1984	3,347	3,463	3,907	1,064	6,830	1,744	3/ 4,830
				Metric tons per hectare			
Yield 4/							
1966–70 average	2.41	22.8	1.32	.34	11.5	13.2	2.0
1971–75 average	2.73	21.7	1.32	.37	11.3	13.7	2.6
1976–80 average	2.93	23.6	1.19	.34	11.8	15.2	3.2
1981	3.04	16.8	1.10	.28	10.5	15.0	3.6
1982	2.91	20.3	1.25	.41	11.4	16.5	3.8
1983	2.89	23.4	1.18	.44	12.1	15.9	3.8
1984	2.57	24.6	1.15	3/ .40	12.5	17.6	3/ 3.8
				1,000 metric tons			
Production							
1966–70 average	6,099	81,118	6,389	458	94,813	19,472	9,710
1971–75 average	7,667	75,984	5,974	456	89,782	22,974	12,393
1976–80 average	8,932	88,732	5,309	393	82,571	26,313	15,177
1981	9,636	60,844	4,678	263	72,139	27,099	17,287
1982	9,282	71,371	5,341	414	78,185	29,993	18,372
1983	9,221	81,813	5,040	469	83,060	29,071	18,392
1984	8,600	85,300	4,500	3/ 430	85,300	30,700	3/ 18,500

1/ Flax grown for fiber and fiber production. 2/ Area and yield figures revised from last year's report. 3/ ERS estimate. 4/ Soviet reported yields vary from calculated yields in some instances.

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Table 10--USSR sugar production and trade, 5-year averages and 1981-84 annual

Year	Industrial production		Imports			Exports refined
	Total	Of which from beets	Raw		Refined	
			Total	From Cuba		
	1,000 metric tons					
1966-70 average	10,203	8,638	2,082	2,081	2	1,097
1971-75 average	9,694	7,771	2,154	1,812	82	249
1976-80 average	10,854	7,370	3,845	3,374	439	139
1981	9,491	5,900	4,190	3,090	963	169
1982	12,070	6,800	6,161	4,224	1,115	247
1983	12,394	8,000	4,797	2,966	1,129	152
1984 2/	12,500	8,300	4,500	3,000	1,012	230

1/ All data on refined basis except raw imports. The factor for converting raw to refined is 0.92.
2/ Estimate.

Table 11--Oilseed production, USSR, 5-year averages and 1981-84 annual

Year	Sun-flower seed	Cotton-seed	Soy-bean	Other 1/	Total
	1,000 metric tons				
Averages					
1971-75	5,974	4,295	471	249	10,989
1976-80	5,310	4,720	529	214	10,773
1981	4,678	5,279	2/ 450	2/ 192	10,599
1982	5,341	5,094	2/ 500	2/ 298	11,233
1983	5,040	3/ 4,600	560	262	10,462
1984	4,500	3/ 4,680	2/ 435	2/ 250	2/ 9,865

1/ Does not include oilseeds from fiber flax and hemp. 2/ ERS estimate. 3/ USDA estimate.

vehicles at harvesttime, and prolonged periods of poor weather in 1979-83 contributed to lower production.

In 1984, area remained close to 1983's 3.5 million hectares. The weather in the major beet areas--the Ukraine and the Central Black Soil Zone of the RSFSR--was satisfactory enough to allow yields to rise to 24.6 tons per hectare, the highest since 1978. The Soviets apparently achieved their plan to cultivate a larger sugarbeet area under what they term "industrial crop technology" (ICT), which means that these areas are to be allotted higher levels of machinery and chemicals. About 60 percent of sugarbeet areas were targeted for ICT.

Efforts to conserve fuel apparently caused no major transportation problems for the harvest. The availability of vehicles to collect and transport beets from fields to processors has taken on added importance in recent years as the distances that farmers must ship sugarbeets have increased. The USSR Ministry of Procurement, which is responsible for off-farm storage facilities, has successfully pursued a policy of constructing large storage facilities in the vicinity of processing plants. The USSR Ministry of Agriculture, which prefers more numerous storage facilities located closer to producers, continues unsuccessfully to contest this policy.

Soviet sugar production from all sources increased by about 100,000 tons to 12.5 million tons on a refined sugar basis (table 10). Two-thirds of total sugar production came from domestic beets, with the remainder from raw sugar imports. [*Thomas Bickerton (202) 475-4509*]

Second Poor Year for Oilseeds

In 1984, Soviet oilseed output likely fell for the second consecutive year (table 11). Production of sunflowerseed, the Soviets' most important domestic oilseed, plummeted to its lowest level since 1963. This year's shortage of protein meal for feed will be far more acute than even the domestic oilseed shortfall indicates because of a sharp cutback in Soviet soybean and soybean meal imports.

Sunflowerseed production dropped to just 4.5 million tons, down 11 percent from 1983's 5.04 million. Crop yields, at 1.15 tons per hectare, are the lowest since 1981. A number of factors are responsible for the continued deterioration in sunflowerseed output. The Soviets have gradually reduced sunflower area in regions where sunflowerseed diseases are prevalent and reallocated acreage to other crops. Some sunflower fields may have been

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cut for fodder because of feed shortages posed by poor domestic grain and hay crops. The Soviets continued to implement measures to improve yields by trying to increase the area sown under ICT to about 40 percent of the crop.

Cottonseed production is estimated at 4.7 million tons, about 500,000 tons less than average 1980–82 output. Soybean output probably declined by more than 20 percent. Weather problems affected soybean output in both the western USSR, where soybean sowing is expanding, and in the Far East region that still produces about 70 percent of the Soviet crop. Rapeseed area fell by almost one-fifth and output declined to an estimated 60,000 tons.

Production of oilseed meal and cake from domestic and foreign sources declined by almost one-fifth to an estimated 3.7 million tons (soybean meal equivalent). Compounding the impact of reduced domestic oilseed output is the sharp reduction in imported soybeans and soybean meal. As a consequence, total oilseed meal availability likely declined by about 2 million tons in 1984 from the unusually large amount in 1983 to an amount similar to the early 1980's. Soybean meal availability probably declined by more than one-half of the 1983 level.

Soviet vegetable oil production declined slightly to about 2.7 million tons. This drop is attributed to the fall-off in the production of sunflowerseed, the Soviets' most important seed for oil. Soviet vegetable oil imports also declined to an estimated 0.6 million tons. [*Thomas Bickerton (202) 475-4509*]

Outlook for the USSR Oilseed Sector

If the Soviet mixed feed industry is to succeed in improving the protein content of mixed feed by 1990, oilseed producers and processors must reverse the downturn in oilseed meal production that occurred in 1984 due to reduced domestic production and an even sharper fall in imports. Even before the USSR announced its poor 1984 oilseed output, it estimated that the protein feed deficit was about 5–6 million tons. The situation has worsened since then and the gap between supply and demand will not be narrowed significantly until the Soviets resume their program of importing more oilseeds and oilseed meal.

In recent years, oilseed meal consumption has varied significantly in the USSR, primarily because of sharp changes in imports. In 1983, oilseed meal use likely reached a record 6 million tons (soybean meal equivalent). However, 1 year later, oilseed meal consumption declined by an estimated 30 percent as soybean meal imports of 2.3 million tons in 1983 were cut to about 0.6 million tons in 1984. The cutback may reflect both the difficulties that the Soviets experienced in handling the meal and the desire to free up hard currency for the large grain imports required in 1984/85.

Little Growth Foreseen in Oilseed Output

In recent years, the domestic oilseed crop has supplied less than 3.7 million tons of oilseed meal annually. By 1990, even under a scenario of average-to-good weather, Soviet oilseed output is expected to increase to about 12.5 million tons, about the same as 1973. Meal output from that crop would be less than 5 million tons.

Current Soviet plans for increasing domestic oilseed production remain far from realistic. Sown area is likely to grow by only about 1 percent annually and remain at about 10 million hectares by the end of the decade. A Soviet plan to change the relative mix of the domestic oilseed base is likely to be slowed by a lack of cooperation and know-how by farm managers.

The Soviets plan to improve yields by increased sowing and cultivation of crops under ICT. The current share of ICT acreage is about 40 percent for most oilseeds. The efficacy of ICT is likely to fall as the area of not only oilseeds, but also grain, potatoes, vegetables, and sugarbeets under ICT expands faster than the Soviet ability to supply the

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quality inputs upon which it depends. Adjustments in procurement prices and attempts to improve worker incentives via the use of contract brigades will have little impact because of constraints imposed by meeting production targets for other crops and the inability to obtain additional quality inputs, from land to machinery to agrochemicals.

Average annual output of sunflowerseed is not expected to exceed 6 million tons by the end of the decade, and will be far below the 7.2-7.5 million-ton official target. The Soviets are likely to experience difficulty in reversing the downward trend in sunflower sown area caused by widespread diseases in the soil and the expansion of more suitable crops into existing sunflower area. Cottonseed output is expected to approach 5.5 million tons by 1990.

The Soviets have put special emphasis on increasing soybean and rapeseed production, which currently accounts for just 6 percent of domestic oilseed output. Efforts to expand soybean area have not fared well in recent years primarily because of poor weather and, to some extent, resistance to soybean production in areas of the European USSR. By 1990, soybean area could increase by about 10-15 percent and production could reach 0.7-0.8 million tons, far less than the 2.2-2.3-million-ton target for the end of the decade. Although rapeseed output has increased in recent years, it is not likely to amount to more than one-fifth of the 1990 goal of 1.5-1.6 million tons. Rapeseed yields, like those of soybeans, are not likely to increase much from current levels as rapeseed is introduced into new areas.

Protein Shortage To Continue Despite Import Growth

Oilseed meal imports fell by more than two-thirds from 1983 to 1984. The Soviets are expected to import larger amounts of oilseeds and oilmeal in 1985, but imports will remain below 1983 levels, particularly if the handling, shipping, and storage difficulties encountered with the record 1983 soybean meal imports cannot be overcome.

The United States, along with Argentina and Brazil, is expected to remain a primary soybean supplier. Argentina and Brazil have long-term supply agreements that have met about two-thirds of Soviet annual imports in recent years. Soybeans are one of the commodities included in the current U.S.-USSR Grain Agreement. The United States is expected to maintain its share of the Soviet import market although the recent entry of the People's Republic of China into the Soviet import market may cut into the export volumes from major Soviet suppliers. The slow growth in Soviet oilseed processing capacity is expected to keep soybean imports below 2 million tons for the rest of the decade.

Brazil and the Netherlands have satisfied Soviet soybean meal requirements since 1979, when the United States last sold soybean meal to the USSR. In 1986, the Brazilian soybean meal supply agreement is scheduled to expire. U.S. chances of reentering the Soviet meal import market should increase with the expected growth of Soviet meal import demand. Total Soviet meal imports could increase to 2-3 million tons by 1990.

Vegetable Oil Consumption To Rise

Per capita vegetable oil consumption in the USSR is expected to continue to rise, but not reach the 13.2-kilogram target for 1990. In 1983, consumption was reported at 9.6 kilograms per person. By the end of the decade, it could rise to 11-12 kilograms. However, the degree to which consumption increases will depend upon continued large vegetable oil imports, which in 1985 could approach or exceed record levels. In recent years, the Soviets have imported as much as 20-30 percent of their vegetable oil supplies. Palm, soybean, and sunflowerseed oil are likely to remain the primary types of vegetable oil imports.
[*Thomas Bickerton (202) 475-4509*]

Potato and Vegetable Output Up

Potato production increased for the fourth consecutive year. Output reached 85.3 million tons, 2 million more than in 1983 despite a small decline in area. Yields are estimated at 12.5 tons per hectare, the best since 1979's 13.0 tons. The improved output is

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attributed to good soil moisture in most growing areas. Secondly, overall equipment preparation was reported to have been better than in 1983. The harvest went particularly well. By the end of September 1984, potato procurements were 2.5 million tons above a year earlier. Vegetable output reached a record 30.7 million tons. The yield of 17.6 tons per hectare was close to the target of 17.7 tons. Soviet fruit production reached an estimated 18.5 million tons in 1984. [*Thomas Bickerton (202) 475-4509*]

Cotton Output Down for Fourth Straight Year

Cotton production declined for the fourth straight year in 1984 to 8.6 million tons (seed cotton basis), and was about 14 percent below 1980's record harvest of 10 million tons. The decline may, in part, reflect accounting adjustments since corruption in the cotton industry may have caused inflated figures for past harvests. On a lint basis, production fell to an estimated 11.7 million bales, well below the previous 5-year average of 12.8 million bales (table 12). The production shortfall is expected to have little, if any, effect on cotton fiber consumption. Instead, exports are expected to decline somewhat from last year and imports to increase.

Cotton area rose 155,000 hectares over 1983, the largest increase since 1970. The seeding pace for 1984 was close to the norm, although the cold, wet spring necessitated some reseeding. By late August, all regions except Turkmenistan reported good stands although crop development was somewhat behind schedule. The resulting late start in harvesting appears to have seriously affected the harvest only in Uzbekistan, where cold weather and snow in early December halted the harvest when it was only 88.5 percent complete.

Another factor that may have contributed to below-target production in Uzbekistan was the large scale anticorruption campaign that was underway. The campaign focused on what has been described as "gross padding" of harvest results that has been "particularly flagrant in the cotton-growing and cotton-ginning sectors" over the past few years. 17/ Although the exact amount of the padding is not known, it is clear from the degree to which authorities have pursued prosecution of fairly high ranking republic party officials that the amount is significant. Thus, if 1984's harvest results are not subject to the same distortions as past harvests, the lack of padding may help to explain the relatively poor performance. In fact, two oblasts--Kashkadarya and Bukhara--that were singled out as experiencing especially rife padding of past production results, also reported the lowest percentage of plan fulfillment for 1984 at 55 and 66 percent, respectively.

To improve cotton quality in Uzbekistan, beginning in 1984 the final 10 percent of the procurement payment made to farms was tied to the quality of cotton delivered, and cotton gin directors were placed in positions of authority on local agricultural boards. Thus, where quality was previously a concern of the ginning industry alone, growers now have both a financial incentive and authoritative direction to produce a higher quality crop. The quality of the 1984 harvest should be above average in part due to the procurement changes in Uzbekistan, but also because a larger share of the harvest was hand picked as the shorter harvesting period exacerbated the usual machinery difficulties. The increase in quality because of hand picking is somewhat of a double-edged sword in that hand picking tends to be relatively expensive and decreases farm profitability, a major concern of Soviet planners. USDA estimates the ginning rate at 29.5 percent for the second consecutive year, slightly below the 5-year average of 30.1 percent. [*Robert Koopman (202) 475-4507*]

Table 12— USSR lint cotton production and trade, 1978/79-1984/85 1/

Year beginning August 1	Lint cotton production	Imports	Exports	Supplies for domestic use 2/
		1,000 bales 3/		
1978/79	11,907	354	3,756	8,505
1979/80	12,833	296	3,770	9,359
1980/81	13,498	153	4,070	9,581
1981/82	13,277	110	4,295	9,092
1982/83	11,939	400	3,300	9,039
1983/84	12,280	750	3,500	9,530
1984/85	11,700	1,100	3,200	9,600

1/ USDA estimates. 2/ Production minus net exports. 3/ 480-pound bales.

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RECORD USSR TRADE SURPLUS

The Soviets achieved a record trade surplus in 1984 of 9 billion rubles ($11 billion). Imports, of which over a third were agricultural goods, grew by 10 percent to 65 billion rubles--$80 billion (table 13). Soviet exports grew at about the same rate, exceeding 74 billion rubles ($91 billion). The Soviet Union achieved the record surplus despite purchasing a record volume of foreign grain. During the first 6 months of 1984, the value of total Soviet imports from the industrialized West declined by 0.8 billion rubles from first-half 1983. The hard currency cushion helped to offset large agricultural purchases in the second half of the year as world prices declined for precious metals and energy, the major hard currency earners for the USSR. Energy exports usually account for about 70 percent of all Soviet hard currency earnings.

Table 13--USSR foreign trade, 1982-84

Direction	1982	1983	1984
	Billion rubles		
Exports	63.2	67.9	74.4
to socialist countries	34.2	37.7	42.1
to Western industrialized countries	18.8	19.7	21.3
to developing countries	10.2	10.5	11.0
Imports	56.4	59.6	65.3
from socialist countries	30.8	33.7	38.2
from Western industrialized countries	18.9	18.7	19.6
from developing countries	6.7	7.2	7.5

Table 14--USSR agricultural imports, by value, 1982-84 1/

Commodity	1982	1983	1984
	Million dollars		
Grain and grain products	6,721	5,363	7,100
Sugar	4,366	4,025	3,800
Livestock and livestock products	1,803	1,670	1,400
Fats and oils	981	893	1,100
Fruits, vegetables, and nuts	1,453	1,304	1,350
Tobacco and products	920	923	900
Oilseeds and oilmeal	2/ 825	2/ 935	500
Other	2,181	2,619	2,650
Total	19,250	17,732	18,800

1/ Derived from USSR official data converted at $1.38 in 1982, $1.35 in 1983 and ERS estimates converted at $1.23 in 1984. 2/ Estimate.

Agricultural Trade

The latest detailed agricultural trade data released by the Soviets cover calendar 1983. These statistics show that Soviet agricultural

Table 15--USSR agricultural imports, 1981-83, by value

Commodity	1981	1982	1983
		Million dollars 1/	
Wheat	3,464.0	3,911.1	3,880.0
Barley	716.7	350.9	180.8
Corn	2,391.9	1,503.1	855.7
Other grain	120.2	55.8	3.9
Sorghum	562.8	299.3	226.9
Wheat flour	559.9	256.9	96.9
Rice, milled	550.5	343.8	118.3
Subtotal	8,366.0	6,720.9	5,362.5
Animals for slaughter	176.3	182.9	169.2
Breeding animals	5.2	7.6	9.6
Meat and meat products	1,647.1	1,430.0	1,369.7
Milk and milk products	143.3	153.6	92.1
Egg and egg products	28.8	29.1	29.4
Vegetables and potatoes	473.0	447.5	423.7
Fruit and berries, fresh	422.8	496.5	463.2
Fruit, dried	158.3	135.8	97.9
Fruit and berries processed	185.2	246.0	210.7
Nuts	227.0	127.3	108.0
Sugar, raw	3,223.2	3,968.9	3,760.4
Sugar, refined	717.0	397.6	264.9
Coffee, cocoa, tea	575.7	496.9	632.7
Spices	38.6	38.1	37.4
Beverages	751.1	789.0	801.1
Tobacco, raw	324.2	383.2	322.6
Tobacco products	541.2	536.3	600.6
Furs	3.5	2.1	3.5
Raw hides	16.0	44.6	60.2
Oilseeds	587.8	456.7	398.9
Oilseed meal 2/	196.7	369.6	535.7
Natural fibers	85.3	85.4	351.7
Wool	534.1	548.7	564.9
Animal fats including butter	514.2	346.6	423.8
Vegetable oils	413.4	441.0	312.3
Technical fats and oils	227.6	193.2	156.7
Seed and planting materials	194.7	175.1	168.1
Total	20,777.3	19,250.2	17,731.5

1/ USSR official data converted at $1.39 in 1981, $1.38 in 1982 and $1.35 in 1983. 2/ Estimate.

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imports totaled an estimated $17.7 billion, which represented the second consecutive year of decline (table 14). Grain imports again accounted for the largest decline, down about $1.4 billion in value and more than 6 million tons in volume (table 15). Soviet sugar imports fell because of the significant improvement in domestic sugarbeet production (table 16). Although oilseed imports declined slightly, oilseed meal imports were estimated to have exceeded a record 2.4 million tons. Soviet agricultural exports declined about 17 percent to around $2.3 billion, as cotton exports fell (tables 17 and 18).

In 1984, the value of Soviet agricultural imports increased only an estimated 6 percent despite a more than 30-percent rise in the value of grain imports and a more than 20-percent increase in fats and oils imports. Probable declines in sugar, livestock and livestock products, soybeans, and soybean meal imports slowed the overall increase.

Table 16--Principal agricultural imports, USSR, 1981-83, by quantity

Commodity	1981	1982	1983
	1,000 metric tons		
Wheat 1/	17,823	21,011	22,979
Barley 1/	300	2,617	1,582
Corn 1/	16,307	11,462	6,410
Other grain 1/	3,795	362	29
Sorghum	3,967	2,709	2,078
Wheat flour 2/	2,178	1,260	548
Rice, milled	1,283	859	323
Subtotal	45,653	40,280	33,949
Meat and meat products 3/	980	939	985
Shell eggs 4/	556	526	530
Vegetables, fresh	213	174	181
Vegetables, canned	388	454	412
Fruit, fresh	1,021	1,158	1,123
Fruit, dried	124	126	85
Sugar, raw	4,190	6,161	4,797
Sugar, refined	963	1,115	1,128
Coffee	41	48	37
Cocoa beans	121	115	162
Tea	84	73	77
Tobacco	105	124	101
Hides and skins 4/	1	1	2
Oilseeds	1,459	1,582	1,422
Oilseed meal 5/	737	1,661	2,411
Cotton lint	22	26	177
Wool, scoured	126	125	150
Vegetable oil, edible	604	866	708

1/ ERS estimates, official USSR sources report only value. 2/ Flour in wheat equivalent at 72 percent. 3/ Does not include live animals. 4/ Million pieces. 5/ Estimate.

Fruit and vegetable imports probably continued their slow rise as domestic supplies continued to lag behind demand. The continued decline in cotton exports, primarily to hard currency markets, caused earnings from agricultural exports to fall again in 1984.

Wheat Imports Continue 7-Year Rise

Soviet grain imports in calendar 1984 are estimated at a record 45 million tons. Wheat imports were record-high for the sixth straight year, and exceeded coarse grain purchases for the third consecutive year, because of extensive damage to the Soviet wheat crop and relatively low world wheat prices during the summer. Total Soviet wheat imports reached 26.4 million tons with an estimated value of $4.4 billion. Coarse grain imports totaled 18 million tons with an estimated value of $2.4 billion.

Table 17--USSR agricultural exports, 1981-83, by value

Commodity	1981	1982	1983
	Million dollars 1/		
Wheat	354.6	337.2	296.3
Barley	7.9	5.9	5.1
Corn	39.4	41.4	23.3
Oats	1.8	2.7	1.7
Other grain	--	5.9	—
Flour-milling products and pulses	291.3	160.9	102.2
Subtotal	695.0	554.0	428.6
Meat and meat products	98.2	48.0	40.8
Milk and milk products	52.6	43.3	48.4
Vegetables, fruit and nuts	46.2	43.2	48.3
Sugar, refined	95.3	97.2	46.5
Confectionaries	9.6	9.9	8.6
Beverages	85.9	87.3	83.5
Tobacco products	21.1	5.8	8.3
Oilseed, tobacco and other raw materials	62.3	67.9	74.0
Natural fibers	1,484.1	1,463.6	1,218.8
Wool	12.1	33.2	17.7
Furs	131.7	121.8	106.1
Raw hides	6.2	23.0	4.5
Animal fats including butter	58.5	59.0	68.5
Vegetable oils	74.0	67.0	51.3
Technical fats and oils	4.4	6.6	7.4
Seeds and planting materials	39.2	42.2	41.1
Total	2,976.4	2,775.0	2,302.4

— = Negligible or none. 1/ USSR official data converted at $1.39 in 1981, $1.38 in 1982, and $1.35 in 1983.

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[On a marketing year basis (July 1984/June 1985), Soviet grain imports are forecast at 52 million tons. Record wheat and wheat product imports of 26 million tons are needed to offset the smallest wheat harvest since 1975, as well as wheat quality problems. Coarse grain imports are expected to reach 25 million tons, the second highest on record. Imports of rice and groats account for the final million tons.]

Table 18--Principal agricultural exports, USSR, 1981-83, by quantity

Commodity	1981	1982	1983
	1,000 metric tons		
Wheat 1/	1,899	1,807	1,703
Rye 1/	--	36	--
Barley 1/	53	40	45
Corn 1/	267	346	170
Oats 1/	13	16	12
Flour 2/	796	338	292
Groats	175	229	126
Pulses	44	39	47
Subtotal	3,247	2,851	2,395
Meat and meat products	70	32	25
Butter	13	15	17
Sugar, refined	169	247	152
Tea	17	17	26
Hides and skins 3/	992	1520	954
Cotton, lint	916	949	774
Flax tow	4	8	8
Vegetable oil, edible	116	114	110
Starch	12	16	20

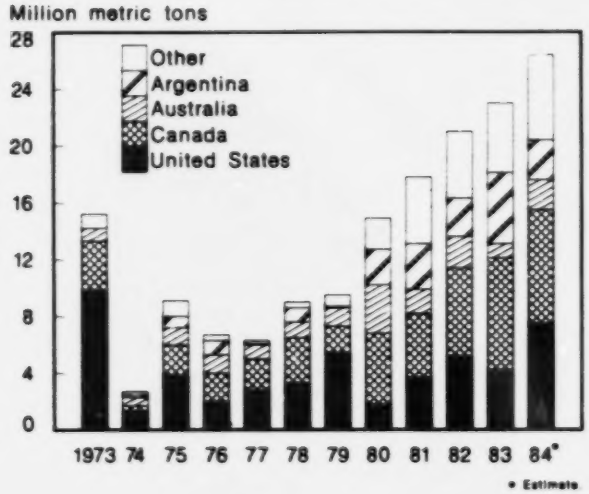
-- = Negligible or none. 1/ ERS estimates, official USSR sources report only value. 2/ Flour in wheat equivalent at 72 percent. 3/ Thousands. Revised to include pig skins.

The United States was the major beneficiary of the increased 1984 Soviet imports. U.S. wheat exports totaled 7.6 million tons and corn reached 10.6 million tons. Until mid-1984, Soviet purchases of U.S. grain were fairly light, but during the summer months, the USSR became an aggressive buyer, especially in the corn market. During July and August alone, the Soviets bought over 6.5 million tons of U.S. corn for delivery in the second year of the Long Term Agreement.

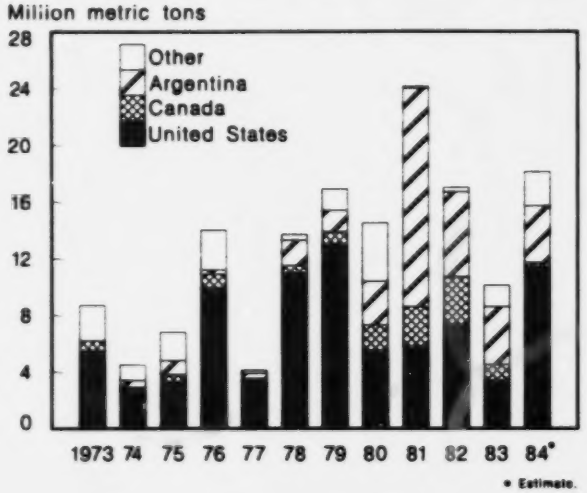
The U.S. share of the USSR grain import market grew substantially in 1984, aided by improved relations after the signing of a new Long Term Grain Agreement in 1983 and the superiority of the U.S. grain distribution system (table 19). The U.S. share of the Soviet wheat import market rose from 18 percent in 1983 to 28 percent in 1984, and the U.S. share of coarse grain imports rose from 34 to 63 percent.

The U.S. gain was offset by a decline in the Argentine share of the Soviet grain market as Argentina experienced bottlenecks at its port facilities and sought to expand trade relations in Asia and Latin America. The Argentine share of Soviet wheat and coarse grain imports fell an estimated 11 and 19 percentage points, respectively, from 1983 to 1984.

USSR Wheat Imports



USSR Coarse Grain Imports



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Other gainers in the USSR market were Australia, which doubled its share of wheat shipments, and Eastern Europe, both of which had bumper grain crops. Canadian and EC shares remained about the same. However, the percentage of USSR wheat imports from France rose appreciably, partially because of French export subsidies. Although the Soviet Union bought most of its grain from traditional suppliers, it tapped new markets to meet its extensive needs. China, India, Finland, and Austria are among the additional trading partners.

Livestock Imports Down from West

Reduced meat imports probably resulted in a lower value of livestock product imports in 1984. Meat and meat product imports are estimated at about 800,000 tons, down from 985,400 in 1983. Decreased imports from western countries accounted for all of the reduction. Argentine beef exports to the USSR in 1984 were reported at 48,900 tons, compared with 90,000 the previous year.

Preliminary reports also indicate a major reduction in USSR imports of New Zealand mutton and lamb and French poultry. Imports of red meat and poultry from Eastern Europe were likely unchanged or increased slightly as these countries attempted to improve their balance of trade with the USSR. Hungary is the USSR's largest East European supplier of meat, with shipments of roughly 125,000 tons each of red meat and poultry in recent years.

Despite increased butter production in 1984, Soviet butter imports increased more than 10 percent to an estimated 225,000 tons. Disappointing vegetable oil production was a contributing factor. In 1983, the major Western exporters of butter to the USSR were New Zealand, Ireland, and France. Soviet egg imports were likely unchanged in 1984 at roughly 530 million, with Eastern Europe continuing to be the primary supplier. Wool imports (scoured) probably declined slightly from 1983's 149,500 tons.

Table 19--Major suppliers of selected agricultural goods to the USSR in 1983

Commodity	Quantity	Supplier and Share
	1,000 metric tons	(Percent)
Grain and grain products 1/	33,949	Canada(27), Argentina(27), United States(22), France(12), Australia(3), Hungary(2), and others(7).
Sugar 2/	5,541	Cuba(49), Brazil(12), FRG(7), France(5), Philippines(4), Australia(3), Romania(1), and others(19).
Fresh meat	678	New Zealand(16), Argentina(8), Romania(8), France(7), Ireland (4), Finland(4), and others(53).
Poultry	206	Hungary(53), Brazil(7), Bulgaria(5), Netherlands(2), and others(33).
Hides and skins 3/	2	Netherlands(46), United States(42), Mongolia(10), and others(2).
Wool, scoured	150	Australia(47), New Zealand(23), Argentina(10), Uruguay(9), Mongolia(6), Afghanistan(4), and Syria(1).
Soybeans	1,366	Argentina(55), United States(35), Brazil(9), and others(1).
Soybean meal 4/	2,331	Brazil(55), Netherlands(44), and others(1).
Fresh fruit	1,123	Hungary(23), Cuba(12), Poland(11), Egypt(10), Bulgaria(8), Greece(6), China(6), and others(24).
Dried fruit	85	Afghanistan(48), Yugoslavia(15), Romania(11), Iran(10), Greece(6), and others(10).
Fresh vegetables	181	Bulgaria(38), Egypt(16), Poland(15), India(9), Romania(8), and others(14).
Cotton lint	177	United States(40), Egypt(15), Sudan(14), Syria(10), Greece(4), Afghanistan(2), and others(15).

1/ Grain includes all major grains, rice, and flour in wheat equivalent at 72 percent. 2/ Total Soviet sugar imports in terms of refined value converted at 0.92. 3/ Million pieces. 4/ Estimate.

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Sugar Savings

Soviet sugar imports in 1984 declined an estimated 7 percent on a raw basis due mainly to large increases in the 1983 and 1984 domestic sugarbeet output. In 1984, the Soviets faced a buyer's market as world sugar prices fell as low as 4 cents per pound. Although information is not yet available on purchases from individual suppliers, the Soviets could have minimized their expenditures by purchasing sugar from non-Cuban suppliers. By way of contrast, the cost of importing sugar from Cuba is likely to have ranged from 36 to 40 cents per pound. The Soviets are believed to be obligated by treaty to import about 3 million tons annually from Cuba.

Oilmeal Imports Drop Sharply

Despite the continually increasing need for protein for the feed livestock sector, Soviet oilseed and oilseed meal imports declined sharply. Oilseed imports fell an estimated 40 percent. Soybean imports, the main oilseed import, are estimated to have declined from about 1.4 million tons in 1983 to less than 0.8 million tons in 1984, with PRC and Argentina the major suppliers. Oilseed meal imports, primarily soybean meal, fell even more sharply, from an estimated 2.4 million tons in 1983 to about 0.8 million tons in 1984. One reason for the reduction may be internal handling and transportation difficulties that the Soviets likely faced in 1983. Another factor may have been the reduction in hard currency funds allocated for oilseed and oilseed product imports. Some of the funds were likely reallocated to pay for record grain imports. According to preliminary reports, Brazil provided most of the 1984 meal. Deliveries from the Netherlands were far below 1983's.

Vegetable oil imports are estimated at about 0.6 million tons, about 15 percent below 1983's level. More than two-thirds of the vegetable oil probably was palm, sunflowerseed, and soybean oil.

Cotton Trade Surplus Declines Again

Soviet cotton trade in 1984 likely followed the 1983 pattern of falling exports and rising imports. Following 1983's 7-fold increase in imports over 1982, the 1984 import estimate of 186,000 tons represents a 5-percent increase from 1983. The major benefactors have been the United States, Egypt, and the Sudan. None of these countries had a share of Soviet cotton imports in 1981 or 1982, but in 1983, they accounted for 40, 15, and 14 percent, respectively of the total. Soviet exports are estimated at 728,000 metric tons, down 6 percent from 1983, and down 23 percent from 2 years earlier. The 1983 decline was reflected in dramatic export reductions to France, Great Britain, Japan, and China. The share of total exports going to socialist countries increased from 66 percent in 1982 to 73 percent in 1983, thus exacerbating the decline in hard currency earnings as trade with socialist countries is usually done within the context of barter agreements. Because of these trends in the past 2 years, the Soviet Union has seen net exports fall from a high of 923,000 tons in 1982 to 542,000 tons in 1984. [*Thomas Bickerton, Emily Moore, Edward Cook, and Robert Koopman (202) 447-8380*]

U.S.-USSR Trade

In 1984, the value of U.S. exports to the USSR increased by more than 60 percent to $3.3 billion (without adjustments for transshipments). Only in 1979 were exports higher, at $3.6 billion (table 20). U.S. imports from the USSR also increased sharply although

Table 20--U.S. trade with the USSR, 1972-84 1/

Year	U.S. exports		U.S. imports	
	Total	Agricultural	Total	Agricultural
	Million dollars			
1972	542	430	88	4
1973	1,191	920	204	5
1974	609	300	335	9
1975	1,834	1,133	243	7
1976	2,306	1,487	214	8
1977	1,621	1,037	221	11
1978	2,250	1,687	529	12
1979	3,604	2,855	873	15
1980	1,510	1,047	432	10
1981	2,430	1,665	357	12
1982	2,589	1,855	229	11
1983	2,002	1,457	341	10
1984 2/	3,284	2,817	554	11

1/ No adjustments made for transshipments.
2/ Preliminary.

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they still are less than 20 percent the value of exports. Nonagricultural imports accounted for virtually all of the increase. Light fuel oils, ammonia, and palladium made up about two-thirds of total imports from the USSR.

Record Agricultural Exports To the USSR

In 1984 agricultural commodities accounted for almost 90 percent of U.S. exports to the Soviet Union (table 21). The value of U.S. agricultural shipments reached a record $2.88 billion. Grains accounted for more than 90 percent of the value.

The United States captured about 42 percent of the Soviet grain import market, compared with just 25 percent in 1983. Total U.S. grain exports to the USSR more than doubled and exceeded 18 million tons (table 22). U.S. exports of wheat, valued at $1.17 billion, rose to over 7.6 million tons. U.S. corn exports, valued at $1.45 billion, more than tripled in volume and exceeded 10.6 million tons.

Cotton exports to the USSR increased by $95 million, making cotton the second highest valued U.S. export to the USSR, overtaking soybeans. The value of soybean exports fell $145 million as shipments dropped from 569,000 tons in 1983 to 46,000 tons in 1984, reflecting an overall Soviet cutback in oilseed and oilseed meal imports.

U.S. agricultural imports from the USSR increased marginally to $11 million. Hides and furskins accounted for more than 90 percent of the value.

Trade Policy Developments

Commercial relations between the United States and the Soviet Union continued to improve in 1984. The growth in U.S.-USSR trade, primarily because of increased grain sales, expanded far beyond the larger minimum purchase levels established by the second U.S.-USSR Grain Agreement. At the first session of the regular, semi-annual consultations called for under the grain agreement and held in London on January 24, 1984, the United States indicated its readiness to supply the USSR with an additional 10 million tons, bringing the U.S. offer for the 1983/84 agreement year to 22 million tons (table 23). On September 11, the United States told the Soviets that it was willing to raise the cap on grain sales during 1984/85,

Table 21--U.S. agricultural trade with the USSR, 1975-84

Commodity	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984
					Million dollars					
Exports 1/										
Wheat	672.7	264.2	426.8	355.8	813.2	336.1	772.6	802.2	800.6	1,170.8
Corn	452.6	1,170.1	412.4	1,109.4	1,540.9	692.9	801.4	834.6	404.4	1,450.4
Other grains	5.2	10.1	--	--	31.1	--	--	--	--	--
Rice	9.2	15.3	25.2	6.0	9.1	--	--	--	--	--
Soybeans	2.9	126.4	154.4	222.1	494.1	45.3	8.4	171.2	159.5	14.0
Peanuts	--	--	4.5	16.6	--	--	--	--	--	--
Oilcake and meal	--	--	1.5	.2	6.7	--	-	--	-	--
Vegetable oil	--	--	--	--	15.8	--	--	22.7	--	9.1
Cattle hides	5.2	2.5	.8	8.1	3.2	.1	.1	-	10.6	10.2
Fruit, nuts, and berries	6.1	8.4	20.4	16.8	15.6	18.5	16.1	13.1	2.3	24.5
Sugar	--	--	-	--	-	--	15.6	-	--	--
Cotton	--	--	--	--	--	--	--	--	72.2	167.4
Tallow, inedible	14.0	--	-	18.7	57.6	28.2	48.5	17.9	21.5	29.7
All other	2.4	7.8	6.8	11.4	12.8	16.7	22.0	4.5	1.8	1.0
Total	1,170.3	1,604.8	1,052.8	1,765.1	3,000.1	1,137.8	1,684.7	1,866.2	1,472.9	2,877.1
Imports										
Casein and mixture	1.7	.7	1.7	2.4	3.0	1.0	.3	.8	.6	.2
Furskins	3.5	6.1	8.0	8.9	9.6	6.5	8.6	7.6	8.3	10.2
Other animal products	.2	.4	.5	.3	.3	--	.1	1.3	.1	--
Gelatin	--	.1	-	--	--	--	--	--	--	--
Licorice root	1.1	.6	--	--	--	--	--	--	--	--
Tobacco fillers	--	--	--	.6	1.2	1.5	.9	.4	.3	.2
All other	.7	.5	.7	.2	.6	.8	2.0	.9	1.1	.5
Total	7.2	8.4	10.9	12.4	14.7	9.8	11.9	11.0	10.4	11.1

-- = Negligible or none. 1/ Including transshipments through Canada, Belgium, the Netherlands, and West Germany.

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Table 22--U.S. grain exports to the USSR, 1983-84

Year/Values	Wheat	Corn
1983		
Million tons	4.836	3.032
Million dollars	801	404
Dollars/ton	166	133
1984		
Million tons	7.646	10.615
Million dollars	1,171	1,450
Dollars/ton	153	137

Table 23--U.S.-USSR grain trade, 1976/77-1984/85
(Grain-agreement year--October/September)

Year	U.S. offer to sell	USSR purchase from U.S.		
		Wheat	Corn	Total
		Million tons		
1976/77	1/ 8	3.1	3.0	6.1
1977/78	15	3.5	11.1	14.6
1978/79	17	4.0	11.5	15.5
1979/80	2/ 25	2.2	5.8	8.0
1980/81	14	3.8	5.7	9.5
1981/82	23	6.1	7.8	13.9
1982/83	23	3.0	3.2	6.2
1983/84	22	7.6	6.5	14.1
1984/85 3/	22	2.9	15.4	18.3

1/ Soviets were also told that the 1976 U.S. grain crop could meet needs in excess of this. 2/ U.S. offer later withdrawn. 3/ Purchases reported as of April 23, 1985.

the second year of the new agreement, to 22 million tons, the same as the previous year.

Several agreements were renewed in 1984 that indicated that cooperation could increase in a number of areas. On June 28, the President announced that action would be taken to revive activity under the U.S.-USSR Agreement on Cooperation in the Field of Agriculture. (This is one of 11 such cooperative agreements established during the early 1970's with the USSR.) Among the goals of this agreement are the expansion of agricultural trade and the exchange of information necessary for such trade. During the first half of 1985, U.S. and Soviet officials plan to meet in Moscow to agree upon a schedule of activities.

Also on June 28, the U.S.-USSR Agreement To Facilitate Economic, Industrial, and Technical Cooperation (EITCA) was renewed. The EITCA, the only agreement in force covering commercial relations between the United States and the USSR, commits both governments to foster commercial cooperation in areas that include the trade of agricultural products. 18/ A followup working group session was held in Moscow in January 1985, the first cabinet level U.S.-USSR commercial commission meeting held since the Soviet invasion of Afghanistan. In April, the United States also renewed the Governing International Fisheries Agreement, the legal basis for Soviet fishing within 200 miles of the U.S. coast. [*Thomas Bickerton (202) 475-4509*]

AGRICULTURE RESTRAINS USSR ECONOMIC GROWTH

The Soviets reported that national income grew 2.6 percent in 1984, apparently slowing to the lowest rate in 3 years. This growth appears low given the growth in gross output of individual sectors in the economy. In the industrial sector, which accounts for about 50 percent of national income, gross output grew 4.2 percent in 1984, well above the planned growth rate of 3.8 percent and equaling 1983's performance. Growth was also substantial in the communications sector (5 percent), retail trade (4.2 percent), and services (5.8 percent). Output in the construction and transportation sectors grew at 3 and 2.9 percent respectively. Agriculture, which accounts for about 20 percent of national income, was the only sector reporting no growth in gross output in 1984. Output was reported as 135 billion rubles, slightly below 1983's 135.2 billion.

Labor productivity increases throughout the economy were reported to be equal to or greater than planned, though the most impressive growth was in industry at 3.8 percent. In the early 1980's, the Soviets managed to slow the 1970's trend of rapidly falling capital productivity. By 1979, capital productivity was declining by 6.4 percent per year, whereas recently it has been falling by only about 3 percent per year.

Population grew at slightly less than 1 percent in 1984, bringing the total as of January 1, 1985, to 276.3 million. Total per capita income increased by 3 percent. Overall wage growth was reported at 2.5 percent, bringing the average wage to 185 rubles per month. Collective farm workers' wages grew

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by 3 percent, to 145 rubles per month. Despite the 4.2-percent growth in retail trade, a 4.3-percent increase in consumer goods production, and the estimated 2-percent increase in per capita meat consumption, consumer demand for more and better quality food products and other consumer goods was not met. Income increases were not fully translated into appreciably higher living standards for the average Soviet citizen. Thus, savings continued to increase--by 8 percent to 202 billion rubles--the largest jump in 5 years. Wage increases may not have had much of an incentive effect on the workforce, which has a surplus of cash on hand, but can not purchase the kinds of goods it would like. Discussion on how to alleviate this problem has generally focused on slowing wage growth, tying it more closely to growth in labor productivity, rather than making a substantial redirection in the economy to upgrade consumer goods.

The conservation of fuel and energy use in the Soviet Union received considerable attention in the Soviet press this past year. Exploration, production, and transportation costs have increased rapidly as the USSR has had to move deeper into Siberia to find new energy supplies. According to V. Filanovskiy, department head of the oil and gas industry at GOSPLAN, "We consider it unprofitable to further increase oil extraction on a large scale as in the past." 19/ Increasing extraction costs have forced the Soviet leadership to initiate fuel conservation measures.

An experiment in economic independence is underway on a limited basis in the Soviet Union. It involves 700 enterprises under five ministries, including the Ukrainian food industry. Enterprises under these ministries are supposed to operate with a higher degree of economic independence, playing a larger role in drawing up their annual production plans, making decisions regarding their production process to maximize profits, having a greater say in product price and wage formation, and undertaking investment projects using their own funds.

Early reports indicate that participating ministries have improved their performance over previous years. However, complaints aired in the press about the experiment have focused on ministry hierarchies that frequently change the plan indicators of individual enterprises, thus inhibiting the enterprise's degree of independence, limiting its potential for production gains, and unnecessarily increasing its production costs. Still the Soviet leadership plans to annually expand the number of participants in the experiment, and 5,000 more enterprises from 21 ministries will participate in 1985.

Crop Shortfalls Hold Back Agriculture

The agro-industrial sector (APK) experienced mixed results in 1984. Gross agricultural output declined slightly from 1983. A drop in crop output caused by weather problems offset increased livestock production. Livestock production's share of the total value of agricultural output is estimated at 56 percent, versus an historical average of 54.5 percent since 1976. The two other sectors of the agro-industrial complex, the food processing and agricultural input industries, reported general increases over 1983 and also exceeded their 1984 output plans.

There appeared to be no major changes in agricultural procurement prices in 1984. The last major revision occurred January 1, 1983, in an effort to improve farm profitability. The hoped-for stimulative effect on output of the increased procurement prices tended to be offset somewhat by the price differentiation among republics and regions. Farms in low productivity environments receive the highest prices, a costly method of stimulating marginal increases in output. Farm profits were reported at 18 billion rubles in 1984. 20/ The increasing costs of agricultural production have resulted in increasing agricultural subsidies. Price subsidies for agricultural commodities rose from 13.3 billion rubles in 1970 to 25.1 billion in 1980. 21/ By 1984, these price subsidies reached 54.7 billion rubles. 22/ If input costs continue to rise and producer prices are held steady as desired, even larger subsidies will be needed in the future.

Drought Cuts Crop Production

Severe drought--in May in the Volga Valley and adjacent areas, and again in June in the western New Lands--contributed strongly to the downturn in Soviet crop production last year. Moisture deficiencies began to develop early in the crop year. Soil moisture recharge

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over the winter was well below normal in extensive grain areas in the southern and eastern portions of the European USSR. Though grain winterkill from cold weather was probably slightly below average, there was unusually large reseeding and overseeding of winter grains due to insufficient soil moisture and duststorms, particularly in the North Caucasus. In the Volga Valley, Central Black Soil Zone, and adjacent areas, a prolonged period of hot, dry weather in May hurt winter grains during jointing and heading, and spring crops during sowing and emergence. In western and northern areas of the European USSR, heavy rains in May and June benefited grains, but hindered the hay harvest.

Temperature and precipitation in the European USSR were closer to normal in July, August, and September than in spring, though episodes of hot, dry weather continued in the Lower Volga Valley, eastern Central Black Soil Zone, northeast Caucasus, and Eastern Ukraine. Crops maturing later than spring small grains--such as potatoes, corn for silage, feed roots, and sugar beets--benefited as a result. Sunflowerseed, which is grown in the more southern areas that remained drier than normal, did not benefit as much. Harvesting conditions were generally good in the European USSR.

In the central and western New Lands, the crop season was dominated by a major drought in July which was centered over the important grain areas of Orenburg and Kustanay. Rains that fell later in the year in these areas were too late to benefit the grain crop and only complicated the harvest. In the eastern New Lands, the crop season was generally wetter and cooler than normal, which retarded crop development. Late-season conditions were satisfactory to complete the crop harvest.

Unusually hot weather dominated southern Kazakhstan and Central Asia over the summer. Poor pasture conditions forced a reduction in sheep numbers. Corn and cotton were also negatively affected, despite extensive irrigation.

Agricultural Investment

Agriculture received 82 percent of the 55 billion rubles invested in the agro-industrial sector in 1984, leaving the food processing and agricultural input industries with 10 billion rubles for their investment needs. The distribution remained relatively unchanged from past years. However, the 1985 plan calls for agriculture's share of total agro-industrial investment to fall by 5 percent compared to 1984. This adjustment may reflect complaints about the disproportionate development of agriculture versus servicing industries. The plan for 1984 also called for such redirection, but it was not effected. Unfortunately, the 1984 and 1985 investment figures cannot be directly compared to figures published in past years due to price changes in some of the components used to calculate investment expenditures. However, the 56.9 billion rubles planned for APK investment in 1985 represent a slightly smaller percentage of total investment for the economy than the respective APK investment figure for 1984.

Soviet investment priorities for 1985 include improved storage and processing facilities (especially for feed production), land reclamation, machinery, and improved rural living conditions. Emphasis is being placed on technological re-equipment and renovation of existing enterprises as the most cost effective approach. According to Soviet estimates, re-equipment and renovation require only .83 rubles of investment to generate one additional ruble of output, while new construction requires 1.21 rubles, expansion of existing enterprises 1.09 rubles, and complete reconstruction .98 rubles. 23/ The emphasis on re-equipment and renovation is consistent with the intensification campaign underway the past few years.

A Disproportionate Share of Inputs

The agro-industrial sector employs 45.2 million people, 35 percent of the total Soviet labor force. Agriculture alone employs 27 million, 21 percent of the national labor force. Labor productivity in the APK rose during 1965-80, but at a steadily declining rate in almost all branches, especially agriculture. Over the same period, wages grew substantially faster than productivity, causing concern about rapidly rising unit labor costs. This trend apparently continued in 1984, but cannot be confirmed because of selective data publication by the Soviet Union. The continuation of such a trend in agriculture is of particular importance given its high percentage of overall employment.

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Efforts to improve labor productivity in agriculture center on the collective contract system, where individual brigades at the subfarm level enter a contract to produce a given amount for a given sum of money. Each brigade operates on the khozraschet system, which provides incentive for the prudent use of inputs and the timely execution of duties. Because each member's remuneration depends upon production costs and the individual's contribution to the production process, Soviet leaders expect the system to lower costs and increase labor productivity. The system is expected to operate on 60 percent of all sown area in 1985.

Total sown area (including double cropping) plus clean summer fallow in 1984 was 232.7 million hectares. Crops were sown on 212.6 million hectares, and 20.1 million hectares were in clean summer fallow. 24/ Although the total of sown area and clean summer fallow has remained relatively constant, growing only 1 percent since 1978, the relative shares have changed. In 1977, fallow amounted to 5 percent and sown area 95 percent of the total. By 1984, clean summer fallow accounted for 9 percent and sown area 91 percent.

Grain area as a percent of total sown area fell from a high of 60 percent in 1977 to 56 percent in 1984. Meanwhile, the area devoted to forage rose from 29 percent to an estimated 33 percent, reflecting the increased emphasis on roughages. Both the technical crops (including cotton, sugarbeets, and oilseeds) and vegetables and melons have remained fairly constant over this period at 7 and 4 percent of total sown area, respectively.

In 1984, about 1.4 million hectares of newly irrigated and drained lands were brought into production. Total irrigated and drained land in agriculture currently exceeds 33 million hectares. At a plenum held in October of 1984, the Communist Party Central Committee presented a long-term reclamation program which envisions 30-32 million hectares of irrigated land, and 19-21 million hectares of drained land by 2000. The program, which is to receive 50 billion rubles in investments during 1986-90, was put forth as the only way to insulate crop production from weather fluctuations. Soviet land reclamation activities are hampered by the local availability of water for use in irrigation, the enormous expense involved in land reclamation projects, management and maintenance problems with projects after they are completed, and the use of improper agronomic systems on reclaimed land. Currently, improved lands account for 14 percent of all arable lands and generate up to one-third of the crop output in the country.

Difficulties remain in coordinating deliveries of farm produce to processing centers, and the quality and diversity of agricultural inputs supplied to farms do not necessarily correspond to their needs. The problems in coordination and cooperation between branches can be partially attributed to restrictive central planning, conflicting performance evaluation criteria between branches, and branch ministry interference in the operation of individual APK enterprises. The rayon agro-industrial organizations (RAPO's), created under the Food Program to improve coordination and cooperation between branches, are still being criticized for their ineffectiveness. It is claimed that many RAPO's are not assertive enough in coordinating operations between branches, that they may be subject to domination by one or two powerful enterprises, and that they often do not take the necessary steps to eliminate investment disproportions between sectors. Thus, by not effectively performing their duties, many RAPO's are being criticized for preventing growth in the agro-industrial sector from reaching its potential.

The Soviets reported that less fertilizer, both organic and chemical, was applied to fields in 1984 than in 1983. Although mineral fertilizer production was up 4 percent in 1984, deliveries to farms were up only 0.5 percent (table 24). Increased exports and the usual waste problems probably accounted for the difference. Extremely wet conditions in parts of the Non Black Soil Zone and very dry conditions in other areas may have hampered applications of those fertilizers that the farms received. Application of organic fertilizers to all crops currently averages 4.2 tons per hectare, although Soviet norms call for an average of 7 tons per hectare. In 1985 the plan calls for 5.6 tons.

Pesticide production totaled 576,000 tons, standard weight (342,000 tons, active ingredients) in 1984, up 4 percent from 1983. The USSR Minister of Agriculture, V. Mesyats,

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stated that herbicide and pesticide production is not sufficient for timely and high quality weed and pest control. This has a negative effect on plant growth and without sufficient chemicals, it is impossible to introduce proposed industrial crop technology programs. 25/

Tractor deliveries to farms increased to 380,000 machines, up 2 percent from 1983, while grain combine deliveries dropped nearly 1 percent to 115,000 units (table 25). Figures reported for cotton pickers show no change at 9,900 units, while pickup bailers increased 6 percent to 36,000 units. For the first time, the Soviets did not report figures for the production or delivery of trucks to agriculture. One possible explanation for this omission is the appreciable drop in truck production at the KamAZ (Kama Automobile Works) reported in the Soviet press. 26/ Despite steady climbs in inventories, the USSR Minister of Agricultural Machinery, A. Ezhevskii, stated that farms presently have only 60 percent of the machinery necessary for the complex mechanization of agriculture. 27/ Much of the available machinery suffers from deterioration and obsolescence.

Table 24--Production and deliveries to agriculture of mineral fertilizers by type, USSR, 5-year averages and 1981-84 annual

Year	Total	Nitrogen	Phosphate	Ground phosphate rock	Potash	Trace elements
			1,000 metric tons 1/			
Production						
1966-70 average	10,379	4,210	2,030	955	3,177	7
1971-75 average	17,877	7,248	3,451	1,032	6,138	8
1976-80 average	23,328	9,283	5,300	828	7,910	7
1981	25,998	10,705	6,059	777	8,449	8
1982	26,738	11,593	6,283	774	8,079	9
1983	29,727	13,007	6,644	773	9,294	9
1984	30,800	2/ 13,225	2/ 6,730	2/ 770	2/ 10,065	2/ 10
Deliveries						
1966-70 average	3/ 8452	3,520	3/ 1,847	857	2,221	7
1971-75 average	13,802	6,209	2,978	904	3,703	8
1976-80 average	18,063	7,632	4,460	827	5,137	7
1981	19,176	8,383	5,098	781	4,905	9
1982	20,152	9,038	5,344	771	4,991	8
1983	22,977	10,302	5,691	774	6,201	9
1984	23,100	2/ 10,385	2/ 5,765	2/ 700	2/ 6,240	2/ 10

1/ Nutrient weight basis. Nitrogen--20.5 percent N, phosphates--18.7 percent P2/05, ground phosphate rock--19 percent P2/05, potash--41.6 percent K20. 2/ Estimate.

Table 25--Tractors, grain combines, and trucks: Inventories, deliveries, and scrapping rates, USSR, 5-year averages and 1981-84 annual 1/

Year	Tractors			Grain combines			Trucks		
	Inventories	Deliveries	Scrapping rate 2/	Inventories	Deliveries	Scrapping rate 2/	Inventories	Deliveries	Scrapping rate 2/
	Thousands		Percent	Thousands		Percent	Thousands		Percent
1966-70 average	1,821	293	12.6	578	94	13.8	1,105	133	NA
1971-75 average	2,189	333	12.3	661	90	12.3	1,282	220	13.6
1976-80 average	2,495	361	12.9	701	108	14.3	1,527	268	15.4
1981	2,598	354	12.4	741	105	11.9	1,653	268	13.2
1982	2,649	350	11.5	771	110	10.8	1,699	268	13.4
1983	2,697	373	12.3	794	116	12.1	1,725	3/ 285	15.2
1984	2,737	380	12.6	4/ 814	115	12.0	4/ 1,750	4/ 280	14.8

NA = Not available. 1/ Inventories are for the end of the year. 2/ Equal to deliveries minus change in inventories divided by inventories at the end of the preceding year. 3/ Ekonomika sel'skogo khozyaistva, no. 1 (1984), p. 4. 4/ Estimate.

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Deliveries of much needed high-powered tractors have led to surprising underutilization. Reports indicate that tractors often carry only 50 percent of their load capacity and have available only half the number of trailer units necessary to perform at their optimum levels. 28/

Rather than increase energy prices to discourage use, the conservation effort has emphasized reducing energy consumption norms for energy intensive production processes. This conservation effort may have been responsible for the sizable decline in the use of trucks borrowed from other sectors of the economy to assist in the 1984 harvest. This reduction forced the farm sector to transport the harvest with fewer and, supposedly more efficiently used, trucks. Also, straight-combining increased at the expense of the more fuel-intensive two-stage harvesting common in the USSR. In addition, an increased share of the Soviet corn crop was harvested and stored at high moisture levels partly to save on drying requirements. Although these measures may have had a negative impact on the size and quality of the Soviet harvest, plans for 1985 continue to emphasize the urgent need for more and better conservation techniques in all sectors of the economy. [*Robert Koopman and Yuri Markish (202) 447-8380*]

Gorbachev and Agricultural Reform

Radical economic reforms in agriculture are not likely in the next several years under Mikhail Gorbachev, the new General Secretary of the Communist Party in the USSR. Gorbachev, who has lengthy ties to the agricultural sector and was Central Committee secretary of agriculture from 1978 to 1984, played a significant role in the formulation of the Food Program, which sets out the goals for agriculture to 1990 and outlines the developments necessary to meet them. In the longer term, if Gorbachev is able to consolidate his power base, if Soviet agricultural performance continues its expensive yet lethargic pace, and if the other "reformed" countries' agricultural progress continues, radical reform in Soviet agriculture and in the Soviet economy cannot be ruled out.

Gorbachev is frequently portrayed in the Western press as a reformer who supports policies that would move agriculture away from its present highly centralized form. The press has highlighted his statements that to get the Soviet economy working properly, "deep transformations" would have to be made not only in the economy, but "in the entire system of social relations"; that truly "revolutionary solutions" are required in science and technology; and that one of the Party's most vital tasks is "a restructuring of the forms and methods of economic management." 29/ In what appears to be his last major policy speech on agriculture, Gorbachev stated "we must put into practice the CPSU Central Committee guideline on delineating more clearly the functions of party and soviet organs." Rather, the Party's duty "is not to tell rural workers what to do and when to do it, but to work systematically on enhancing the body's responsibility for their jobs and for the end results of production." 30/ Such statements lose their impact when put in the context of official Soviet rhetoric and the policies already long established by the CPSU Central Committee.

Gorbachev is a "within system" reformer versus a "system" reformer. He has not supported a free market system. His emphasis has been more on streamlining and optimizing the functioning of the present Soviet system. The management reforms in the Food Program involve improving the planning process rather than moving away from centralized planning. Thus, a key element of the program is to increase vertical integration in the food system from the input industries to farms to processing facilities. A second major element, the use of collective contracts to tie worker remuneration more closely to output, really is renewed emphasis on a system advocated in the 1960's. A third element ties private plot production more closely to the socialized sector. For example, the limitations on the number of livestock held by private plot owners were eased, so long as the animals are raised under contract with state and collective farms. Under the Food Program, prices remain administratively set and subject to

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only infrequent revision. State procurement prices for agricultural commodities have been significantly modified only twice since 1980.

The Hungarian and Chinese reform models are more radical than what Gorbachev appears to favor at present. Both models, particularly the Chinese one, include greater emphasis on free markets. Western analysts agree that a market orientation would improve the efficiency of Soviet agriculture. Furthermore, greater attention to market forces in the entire economy could lead to a de-emphasis on agricultural production in the USSR, which has a comparative disadvantage for agricultural production because of climatic limitations.

If the Food Program does not begin to show improvement, Gorbachev and the party leadership may seriously examine a more market-oriented solution. However, the Chinese and Hungarian solutions have developed in sociopolitical and natural resource contexts that are substantially different from that of the USSR. Furthermore, both countries have spent considerably less time under the Marxist-Leninist system. Marshall Goldman, the associate director of the Russian Research Center at Harvard University, concludes:

> The legacy of the first sixty-five years of Soviet rule imposes an enormous burden on Soviet leadership, both present and future. In some respects, the Stalinist model has been modified, but the basic character of the model is little changed. Thus the regime still holds together more from inertia and fear than from momentum and hope. The sense of radical change and experiment has long since passed. 31/

Although Goldman may overstate the case, it is still valid and must be emphasized. Substantial forces work to slow change in the USSR. [*Kathryn Zeimetz and Robert Koopman (202) 447-8380*]

OUTLOOK

Weather remains the primary determinant of the short term agricultural outlook for the USSR. And weather during the 1984/85 winter set the stage for improvements in crop production. Generally, agriculture will benefit from increased availability of manufactured inputs, albeit with the usual quality problems. Labor constraints will remain, although rural outmigration has slowed, a mixed blessing for the economy considering the labor shortage in the nonagricultural sector. The benefits from increased fallow land should be felt, but if press comments about the poor maintenance of clean summer fallow apply to large areas, the benefits may not be realized. Another positive factor may be in improved morale associated with more vigorous leadership that may be seen with Mikhail Gorbachev as the new General Secretary of the Communist Party.

Grain Off to Better Start

Fall sowing and overwintering conditions were better than in the last 3 years. Fall-sown grain area was reported at 35 million hectares, about the same as last year. The total grain area is expected to increase only slightly as the Soviets may continue to expand the land devoted to nongrain feeds and may increase clean summer fallow marginally over 1984's 20.1 million hectares. The Soviets wish to increase land devoted to pulses, sorghum, and corn as a means of improving feed supplies. Sorghum's greater tolerance to drought and high soil salinity makes it an attractive feed alternative, although historically it has been a very minor crop in the USSR. Expansion plans for corn and sorghum have had little success in recent years.

In addition to the improved weather conditions this fall and winter and area adjustments, the Soviet emphasis on intensive production techniques could have a positive impact on 1985 grain yields. This year, 6.4 million hectares of winter wheat and 10.5 million hectares of spring wheat were to be sown under ICT, which includes planting over fallowed land and increased input use. The Soviets optimistically project that the new methods will provide an additional 16-18 million tons of wheat. With the increased emphasis on intensive wheat production, area may not increase much in 1985. ICT is also to be used on 3.5 million hectares of corn.

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For 1985, the Soviets reported an ambitious 11-percent increase in fertilizer production, and a 15-percent increase in fertilizer deliveries to farms. 32/ It is highly unlikely that these targets will be approached, especially given the poor start in early 1985. The increased fertilizer deliveries are targeted for application to grain and feed crops, as the expected return from increased application on them is higher than for vegetables and other technical crops, which are already fairly heavily fertilized. 33/

Seed supplies are generally adequate for the 1985 grain crop. Several republics have overfulfilled their seed procurement targets. Seed quality appears to be a problem in parts of the RSFSR and throughout Central Asia. This year, Soviet farms reportedly have a larger supply of good hybrid corn.

One factor which could limit grain production this year is the slow start in spring planting. The extensive snow cover and late spring, caused sowing by mid-April to be the slowest this 5-year plan, although still ahead of 1979 and 1980. The Soviet farmers' failure to complete top dressing last fall made field work especially heavy in the spring.

Grain production is targeted at 238-243 million tons annually for 1981-85. Even if area were up from last year and if yield approached the 1955-1983 linear trend, output would fall well below the target. However, such output would be substantially above 1984 production.

Severe Winter Taxes Feeds

The reduced quantity and quality of feeds and unusually severe winter weather retarded growth in the livestock sector in early 1985. With more normal precipitation this spring and summer, forage production would improve in 1985. Nevertheless, livestock production may grow little this year as evidenced by the beginning year inventories. Meat production could increase 1-2 percent, but if problems develop with the 1985 grain and feed crops, output might show no increase. In any case, meat production will remain well below the 1985 Food Program goal of 18.2 million tons.

Very modest improvements are likely in milk yields and production. Without an unusually favorable pasturing season, milk production should remain short of 100 million tons and could actually decline. Egg production may increase no more than 2 percent as the Five Year Plan production targets for 1985 have already been exceeded. The lack of strong growth in livestock production will limit output in the food industry, though the trend of more rapid increases in state procurements than in production of livestock products is likely to continue in 1985.

Cotton Not Likely To Approach Record

With normal weather conditions, cotton output for 1985 should be able to reverse its 3-year decline. Cotton area expansion should be minimal, but if yields improve, output would increase significantly over 1984. The 1985 plan figure will most likely be about 9.1 million tons (seed basis). The 1985 "socialist obligation" for Uzbekistan, which had been producing about two-thirds of Soviet cotton, at 5.73 million tons is 5 percent lower than in 1984. The socialist obligation is generally above the plan figure. In 1984, the plan for Uzbekistan was 5.965 million tons. 34/

A possible difficulty for the coming crop is the reported low quality of cottonseed in Central Asia. If seed quality is indeed low, it could significantly reduce the ability of cotton growers to harvest their planned quantities. Another factor that may cause an apparent slowdown in future cotton output is accounting adjustments made after 1983 as a result of the anticorruption campaign in Uzbekistan.

Both quality and quantity of the 1985 crop may be positively affected by the increased monetary incentives for higher quality. Should these quality incentives be effective, it is possible there will be an improvement in the ginning rate for 1985. The 10-year average is 31 percent. One possible complication of the quality issue is the recent report calling for less use of nonagricultural labor (in particular students) in the harvest. 35/ A decrease in the available labor force would probably result in less hand harvesting. Farm officials claim that the increased use of nonfarm labor is necessary because new hybrid plants ripen late and unevenly, making mechanical harvesting impractical.

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Other Crop Outlook

This year is the last of the 11th Five Year Plan which will be regarded as a relative failure for the Soviet oilseed sector. Not even a bumper oilseed crop would allow Soviet agriculture to remotely approach targeted levels of production. The current plan calls for sunflowerseed output to average 6.7 million tons annually for 1981–85. Even if the Soviets succeed in increasing ICT area, output in 1985 is likely to remain well below plan, given the likelihood of a continued downward trend in sunflower sown area. Soybean output is likely to be only slightly more than one–third the 1981–85 average annual target of 1.4 million tons. Rapeseed output is likely to be only about one–fifth of the 1/2–million–ton target.

No expansion in sugarbeet area is likely. The Soviets will probably continue to take marginal areas out of beet production. Beet output, at best, will reach the 85–90 million–ton range. The main factor in improving yields appears to be the gradual expansion of area under intensified application of machinery and chemicals (ICT). At best, ICT area should expand to three–fourths of the crop because of existing constraints on Soviet inputs.

Modest Decline in Imports

The value of 1985 Soviet agricultural imports should fall somewhat if agricultural production improves from 1984. Grain purchases will remain a substantial drain on USSR hard currency. Even with a more normal grain harvest this year, the Soviets will still be importing large quantities of grain in calendar year 1985. The value of Soviet grain imports is expected to decline somewhat more than quantity as wheat and corn prices will probably be lower in 1985.

Shares of the Soviet grain import market will probably not shift substantially in 1985. Argentina continues to desire market diversification. The Soviet Union will probably maintain its large purchases of Australian wheat due to that country's high–quality carryover stocks. The Soviet emphasis on increasing livestock product output and the prominent place of the United States in the world coarse grain market should assure the United States a large share of the Soviet grain import market in 1985.

The USSR has long term agreements that guarantee grain imports of roughly 20 million tons in 1985. An agreement with Canada calls for minimum purchases of 5.5 million tons this year. Historically, these purchases have been predominately wheat. The U.S.–USSR long term agreement requires purchase of 9 million tons of grain. The Soviets are obliged to buy 500,000 tons of corn annually from Brazil. However, Brazil has been unable to supply this amount since 1983. The grain pact with Argentina, which expires in December 1985, guarantees purchases of 4 million tons of coarse grains annually. According to press reports, the Soviets and Argentines are discussing an agreement renewal or negotiation of a new agreement. An agreement with Hungary calls for annual average grain shipments of 800,000 tons, most of which have been wheat.

More recently, the Soviets have concluded a cereal trade agreement with Turkey that calls for Soviet purchases of 100,000 tons of grain in 1986 and 1.5 million tons by 1990. While the agreement does not specify grain type, both the Turks and the Soviets may be more interested in coarse grain trade. The Turks usually consume their domestic wheat production and the Soviets may want to diversify their sources of coarse grain. Reports that the Soviets recently purchased 500,000 tons of manioc from Thailand provide another indication of the Soviet desire to diversify sources of imported feeds.

Livestock and livestock product imports may increase somewhat as the Soviets augment supplies because of a probable slower rate of growth in domestic output in 1985 and seek to raise livestock productivity by importing quality breeding stock. Sugar imports may continue to fall because of the higher 1985 sugarbeet production. Oilseed and oilseed meal imports are expected to increase as Soviet measures to improve handling oilseed meals show positive results, and as pressure on hard currency eases somewhat with the anticipated decline in grain imports.

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